A STUDY TO EVALUATE THE EFFECTIVENESS OF GINGER TEA IN REDUCING PRIMARY DYSMENORRHOEA AMONG ADOLESCENT GIRLS IN SELECTED GOVERNMENT HIGHER SECONDARY SCHOOLS AT THENI.

COIMBATORE

A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE DEGREE OF

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BY

RENUGADEVI.R

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APPROVED BY THE DISSERTATION COMMITTEE ON.....

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APRIL2014

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1. INTERNAL EXAMINER.....

2. EXTERNAL EXAMINER.....

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"Shuklaambara dharam vishnum shashi varnam chatyr bhujam

Prasanna vadanam dhyaayet sarva vighna upashaanthaye"

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ABSTRACT

Introduction:

Dysmenorrhoea is a common problem among girls in the reproductive age. Primary dysmenorrhoea refers to severe lower abdomen pain which is associated with nausea, vomiting, headache. It is a condition which every girls faces in their life and it can have many associated effects which may disrupt the quality of life.

Objectives:

- To assess the level of primary dysmenorrhoea among adolescent girls in experimental and control group.
- To evaluate the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls in experimental group.
- To find out the association between the level of primary dysmenorrhoea among adolescent girls with their selected demographic variables in experimental and control group.

Subject & Method: The study was conducted in Government Higher Secondary School at Lakshmipuram and Saruthuppatty. The research design adopted was true experimental pre test and post test control group design. Simple random technique was adopted to select the desired sample. The sample size was 60 (30 in the experimental group and 30 in the control group) 200ml of ginger tea was given at four times per day for 3 consecutive days. Standardized visual analogue scale was used to assess the level of primary dysmenorrhoea .

Results: The collected data were analyzed using both descriptive and inferential statistics. The mean post-test score of experimental group was lesser than the mean post test score of control group. The calculated mean difference was 3.3. The obtained‘t’ value, 21.39 was significant at $p< 0.05$ level. It is inferred that ginger tea was effective in reducing primary dysmenorrhoea among adolescent girls.

Conclusion: The main conclusion drawn from this present study was after administration of ginger tea there was a significant decrease in the level of primary dysmenorrhoea. Hence it was concluded that ginger tea was effective in reducing primary dysmenorrhoea among adolescent girls.

KEYWORDS: Effectiveness, Ginger tea, Primary Dysmenorrhea and Adolescent girls.

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CHAPTER I

INTRODUCTION

"**Adolescents are tomorrow's adult population and their well being is crucial. -WHO (2005)**

Adolescence is a transition period from childhood to adulthood during which major changes takes place and is characterized by a spurt in physical, endocrinal, emotional and mental growth, with a change from complete dependence to relative independence. Adolescence is divided into early Adolescence (12-13yrs) Middle Adolescence (14-16yrs), Late Adolescence (17-19yrs).

As the direct reproducers of future generations, the health of adolescent girls has an impact on the health of the future population. Almost a quarter of Indian's population comprise of girls between 20 years.

Adolescence is the time of life between puberty and psychophysical maturity when crucial endocronological, metabolic, somatic and psychological changes occur in girls. During this process, sequential phases mark the maturation of the complex endocrinological system that comprises the hypothalamus, pituitary gland, ovary, and their interactions. Healthy reproductive function is the expected endpoint of this process. The timing of this process is individual and specific, within a broad range of normality.

Menstruation is the shedding of the uterine lining (endometrium). It occurs on a regular basis in reproductive-age females of certain mammal species. Overt menstruation where there is bleeding from the uterus through the vagina is found primarily in humans.

Menstruation lasts for a few days usually 3 to 5 days, but anywhere from 2 to 7 days considered normal. The average blood loss during menstruation is 35 milliliters with 10-80 ml considered normal. Menstruation is the most visible phase of the menstrual cycle. Menstrual cycles are counted from the first day of menstrual bleeding, because the onset of menstruation corresponds closely with the hormonal cycle.

Menstrual disorders are a common problem for all adolescents. 75% of girls experience problems like irregular menstruation, excessive bleeding, polymenorrhea, oligomenorrhea and dysmenorrhea which are associated with menstruation.

The term dysmenorrhoea is derived from the Greek word Dys(difficult, painful, or abnormal), meno (month) and rrohea (flow).It refers to severe painful cramping sensation ,in the lower abdomen often accompanied by biological symptoms like ,sweating ,tachycardia ,headache, nausea ,vomiting, diarrhea.

Dysmenorrhoea is thought to be caused by the release of prostaglandins in the menstrual fluid, which causes uterine contractions and pain. Vasopressin also may play a role by increasing uterine contractility and causing ischemic pain as a result of

vasoconstriction. Elevated vasopressin levels have been reported in women with primary dysmenorrhoea.

Dysmenorrhoea is a common problem in adolescents. Dysmenorrhea is classified as primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhoea refers to the presence of recurrent cramps, lower abdominal pain which occurs during menses and in the absence of demonstrable disease. In primary dysmenorrhoea pain may radiate to the back of the legs or the lower back and it usually develops within hours of the start of the menstruation and peaks as the flow becomes heaviest during the first day or second day of the cycle. Secondary dysmenorrhoea is associated with any pelvic diseases like endometriosis, adenomysis, fibroids, pelvic inflammatory disease, cervical stenosis, uterine polyps intrauterine adhesions, congenital malformation, Allen master syndrome.

Primary Dysmenorrhoea is the most common gynecological disorder among female adolescent, with a prevalence of 60% to 93 %. The etiology of primary dysmenorrhoea is not precisely understood, but most symptoms can be explained by the action of uterine prostaglandins, particularly PGF2-Alfa (prostaglandin F2). The risk factors for primary dysmenorrhoea are age less than 20 years, null parity, heavy menstrual flow, smoking, upper socioeconomic status, attempts to lose weight, physical inactivity, disruption of social networks, depression and anxiety.

Primary dysmenorrhoea is an important problem among adolescents. It affects their academic performance, social and sports activities, and daily routine activities and is an important cause for school absenteeism.

Ginger, botanically known ‘Zingier officinale’ and in Sanskrit as sringavera is used widely in food to make it tasty, to provide aroma and as a preservative etc. It is used as medicine in India from Vedic period and in Ayurveda. It is called Mahaaushad meaning great medicine.

Ginger improves the circulation in the tissues which remove the metabolic products from tissues more efficiently and provide relief from cramps and stiffness of the muscle. It also reduces the formation of prostaglandin and thrombin thus decreasing the clotting ability of the blood. A hot cup of ginger tea is said to be an excellent remedy for suppressed menstruation. It had agreeable warm feeling which is so grateful in primary dysmenorrhoea.

According to the University of Maryland Medical centre (2013) reports revealed that Ginger tea was used in the treatment of menstrual cramps. Many women claim that ginger tea helps and rid them of menstrual cramps. A piece of fresh ginger and boil with a cup of water and drink two or four times a day for three days. The anti cramping compounds in ginger effectively help to relieve primary dysmenorrhoea. In the absence of menstruation women in the reproductive age, this ginger also can help to induce menstruation.

Need for the study

"Natural Healing with Herbs for your Healthy life"

Primary dysmenorrhoea affects approximately 50% of menstruating women, and 10% are incapacitated for up to 3days. Primary dysmenorrhoea is the leading

causes of losing time from school and work among women of childbearing age. This pain may precede menstruation by several days or may accompany it, and usually subside as menstruation tapers off. Dysmenorrhoea refers to menstrual pain severe enough to limit normal activities or required medication. It may co-exist with excessively heavy blood loss (menorrhagia)

World health organization (2010) reports reveal that there are 700 million adolescent girls in worldwide and 500 million in developing countries. Adolescents account for one fifth of the world's population and have been on an increasing trend.

Govt of India, (2006) report reveals that adolescence account for 62.8% of the population. This implies that about 230 million Indians are adolescent girls in the age group of 10 to 19 years.

Government of Tamilnadu census (2011) report shows that 59.7% of the populations were in the age group of 10-20years.

Department of Women and Child Development (2010) report reveals that 89.4% of adolescent girls were suffering from primary dysmenorrhoea and 11.6% of adolescent girls were suffering from secondary dysmenorrhoea.

According to International Journal of Pharmacy (2000) report reveals that soaking a towel in warm ginger tea and placing it on the stomach or lower back during menstruation help to relieve cramps in a big way. It soothes the tough muscles and prevents blood from clotting.

According to International Occupational Health Survey (2000) by WHO, primary dysmenorrhoea is the most common gynecological problem in menstruating women and the prevalence rate is up to 90% and is one of the most important causes of workplace absenteeism and decreasing quality of life among women .About one in ten women are unable to perform their normal routine for 1-3days of each menstrual cycle due to severe uterine cramping. Dysmenorrhoea accounts for an annual loss of 600 million work hours and US $2 billion dollars in productivity.

The prevalence of dysmenorrhoea is highest in adolescent, with estimates ranging from 20 to 90 percent. About 65 percent of adolescent girls report severe dysmenorrhoea and it is the leading cause of recurrent short-term school absenteeism in adolescent girls.

Liliwat et.al.,(2008) conducted a cross-sectional study to determine the prevalence of dysmenorrhoea its associated factors and its effects on school activities among 150 adolescent girls in a secondary school in a rural district of Selangor, Malaysia. True experimental design was adopted and by using simple random sampling technique the samples were selected. The prevalence of dysmenorrhoea was 62.3%. It was significantly higher in the middle adolescent (15 to 17 years old) age group girls with regular menstrual cycle and a positive family history.

Shrotriya.R,(2004) conducted a prevalence study on dysmenorrhoea in two separate physical education classes at high school adolescent girls in Pune. Pre experimental design was used in this study and the 300 samples were enrolled by using convenient sampling technique. The data were collected by using 10 point Likert scale. The results showed that the prevalence of primary dysmenorrhoea is high as 91% among adolescent girls.

George et.al.,(2000) conducted a cross sectional study on the burden and prevalence of primary dysmenorrhoea among adolescent girls in a rural area of Nellore. Quasi experimental design was adopted in this study, 500 samples were selected by using simple random sampling methods. The data were collected by using Likert scale. The study findings revealed that the prevalence of primary dysmenorrhoea was found as high as 70.8% among adolescent girls.

International Herbal Remedies Research Centre in USA (2002) has given statistic report on using a pharmacological measure will cause more unwanted side effects in primary dysmenorrhoea. Approximately 70% adolescent use medications to manage primary dysmenorrhoea and about 30% do not use prescription of medication. Several non pharmaceutical approaches to alleviate the dysmenorrhoea are existing. Alternative and complementary therapy is widely accepted and available. Among this ginger is said to be most effective in treating primary dysmenorrhoea. Ginger helps to relieve menstrual discomfort through increased vasodilatation, suppression of prostaglandins and stunting of blood away from viscera thus decreasing pain.

Keeping in view of the above findings in literature, dysmenorrhoea is most common problem, which adversely affects the day today activities of students as well as working women. In her personal experience, investigator felt that many adolescent girls suffered from dysmenorrhoea, which its leads to increase in school absenteeism and co curricular activities. After doing the extensive review of literature regarding ginger and primary dysmenorrhoea the investigator motivated to undertake the study on effect of ginger tea on reducing level of primary dysmenorrhoea.

Statement of the problem:

"A study to Evaluate the Effectiveness of Ginger Tea in reducing Primary Dysmenorrhoea among Adolescent Girls in Selected Government Higher Secondary Schools at Theni."

Objectives of the study:

- To assess the level of primary dysmenorrhoea among adolescent girls in experimental and control group.
- To evaluate the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls in experimental group.
- To find out the association between the level of primary dysmenorrhoea among adolescent girls with their selected demographic variables in experimental and control group.

Hypotheses:

H1-There will be a significant difference between the mean pre and post test level of primary dysmenorrhoea among adolescent girls in experimental group and control group.

H2-There will be a significant difference between the mean post test level of primary dysmenorrhoea among adolescent girls in experimental and control group.

H3-There will be a significant association between the level of primary dysmenorrhoea among adolescent girls with their selected demographic variables in experimental and control Group.

Operational Definitions:

Effectiveness:

Effectiveness denotes the capability or capacity of producing a desired result. In this study, it refers to the outcomes of ginger tea in terms of reducing the level of primary dysmenorrhoea as measured by visual analogue scale.

Ginger:

Ginger is an herb, which is said to have most potent in medicinal properties.

Ginger Tea

It is a beverage prepared by boiling 250mg of peeled ginger in 200ml water for 10mts.

Primary Dysmenorrhoea

Primary dysmenorrhoea refers to severe painful cramping sensation in the lower abdomen that occurs during menstruation.

Adolescent girls

Adolescent girls in the age group of 12-18years.

Assumptions

- Primary dysmenorrhoea is common among adolescent girls.
- Ginger tea has an effect on reducing primary dysmenorrhoea among adolescent girls.

Delimitations

- The study was delimited to the adolescent girls between the age group of 12-18 years.
- The study is delimited to selected government higher secondary schools at Theni.

Projected Outcome

- The study will help the nurses to assess the level of primary dysmenorrhoea among adolescent girls.
- The study will help the nurses to identify the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls.

- The study will help the nurses to create awareness about the home remedy with ginger tea in reducing primary dysmenorrhoea among adolescent girls.
- The study will help the nurse to adopt the use of ginger tea as a complementary therapy as it reduces the primary dysmenorrhoea among adolescent girls.

CHAPTER II

REVIEW OF LITERATURE

Review of literature is an important step in the development of any research project. It helps the investigator to analyze what is already known about the topic and do describe methods of inquiry used in earlier work including the success and short comings. This chapter deals with the collected information relevant to the present study through the published and unpublished materials. These publications were the foundation to carry out the research work.

According to Polit and hungler (2004) review of literature is a critical summary of research on a topic of interest, often prepared to put a research problem in context.

An extensive review of literature was done and it was organized under the following heading:

- Studies Related to Prevalence and Incidence of Primary Dysmenorrhoea.
- Studies Related to Effectiveness of Ginger Tea.
- Studies Related to Effectiveness of Ginger Tea in Reducing the Primary Dysmenorrhoea.

Studies related to Prevalence of Primary Dysmenorrhoea.

Tasneem Sandoz et.al.,(2010) conducted a prospective cross sectional study on the prevalence ,severity and treatment of dysmenorrhea in medical and nursing students. True experimental design was adopted. Simple random sampling technique used to select the total of 401 and 304 students from SRM University at Chennai and 97 students from Vydehi Institute of Medical Sciences and Research Center at Bangalore. The samples were asked to complete a self assessment questionnaire related to menstruation. The study report revealed that in SRM University at Chennai out of 304 samples 76.30 % had dysmenorrhoea among them 57.1 % had severe dysmenorrhoea and 19.20% had mild dysmenorrhoea and in Vydehi Institute of Medical Sciences and Research Center at Bangalore 100% had dysmenorrhea and among them 73.19 % had severe dysmenorrhoea, 26.80 % had mild dysmenorrhoea.

Hillen et.al,(2009) conducted an explorative study on prevalence of primary dysmenorrhoea and its impact on school, sports, social activities, among senior high school girls in Perth, Western Australia. Pre experimental design was adopted and a total of 388 female students were selected. The data were collected by using dysmenorrhoea assessment questionnaire. The study findings revealed that the prevalence of primary dysmenorrhoea was found to be 97% high among senior high school girls.

Hanninen.T,et.al,(2005) conducted an explorative study to assess the prevalence of primary dysmenorrhoea and among adolescent girls in high school Mexican university at Gwalior. True experimental design was adopted and 100 high school students were selected by using purposive sampling technique. Data were collected by using Likert scale. The study results concluded that the prevalence of primary dysmenorrhoea was 79.67% and majority of them, 67.96%, were suffered regularly from primary dysmenorrhoea.

Dittakarn et.al,(2003) conducted a descriptive study on prevalence of primary dysmenorrhoea in University of California among adolescent girls. Quasi experimental design was used in this study. Total 700 samples were selected by using simple random sampling technique. The data were collected by using Visual analogue scale. The study findings revealed that the prevalence of primary dysmenorrhoea were 88 % among adolescent girls in University of California.

Koivisto K,(2001) conducted a cross sectional study on prevalence of primary dysmenorrhoea among adolescent girls in rural area of Delhi. Quasi experimental design was adopted and by using simple random sampling technique 500 samples were selected. The data were collected by using Visual analogue scale and Likert scale. The study findings revealed that the prevalence of primary dysmenorrhoea was found as high as 70.8% among adolescent girls

Coria, et.al.,(2001) conducted a longitudinal study to assess the prevalence of primary dysmenorrhoea among adolescent girls in Switzerland. The study comprised 327 samples by using the purposive sampling technique. The data were collected by using Modified Menstrual Distress Questionnaire. The study results revealed that the prevalence of primary dysmenorrhoea was as high as 78% in adolescent girls.

Martin et.al, (2001) conducted a longitudinal study on prevalence of primary dysmenorrhoea and its severity among a group of adolescents in Turkey. True experimental design was used in this study and by using purposive sampling technique 207 Samples were selected. The data were collected by 95-item dysmenorrhoea questionnaires. The study results revealed that the prevalence of primary dysmenorrhoea was found to be 96 % among a group of adolescents.

Larrabee GJ, et.al,(2000) conducted a descriptive study on prevalence of primary dysmenorrhea, its associated factors and its effects on school activities in a rural district of Selangor, Malaysia. True experimental design was adopted and by using simple random sampling technique 150 adolescent girls were selected. A self administered questionnaire consisting of 20-items was used. The study results revealed that the prevalence of primary dysmenorrhoea was 70 %. It was significantly higher in the middle adolescent in the age group of 12 to 17 years.

Banikarim et.al.,(2000) conducted a cross sectional study on prevalence of primary dysmenorrhoea among female adolescent girls in urban high school at Africa. True experimental design was adopted and total of 706 Hispanic female adolescent were enrolled by using convenient sampling technique. The data were collected by a 31-item self administered dysmenorrhoea questionnaire. 86% Primary Dysmenorrhoea was highly prevalent among Hispanic middle adolescents with regular menstrual cycle.

Studies Related to Effectiveness of Ginger Tea

Zick SM, et.al,,(2013) conducted a comparative study to assess the effectiveness of ginger tea on cyclooxygenase-1 and 15-hydroxyprostaglandin dehydrogenase expression in colonic mucosa of humans at normal and increased risk for colorectal cancer in California university. Quasi experimental design was adopted. 50 samples were selected by using purposive sampling technique. The data was collected by using sigmiodscopy biopsy.50ml of ginger tea was given for 28 days. The study findings revealed that the ginger tea was effective in reducing risk of colorectal cancer.

Sanghal akhilet.al.,(2012) conducted an experimental study on effect of ginger tea on hypertension and hyperlipidemia patients . Pre experimental design was adopted and 100 hypertension clients were enrolled by simple random sampling technique. Blood pressure was measured with the help of NIBP machine and measurement of lipid profile with the help of biochemical methods using semi-auto

analyzer. The study result concluded that ginger tea act as a better natural and safer alternative therapy and reduces risk factors like hypertension and hyperlipidemia.

Niger et.al.,(2011) conducted a study on Anti-diabetic and Anti-oxidant effects of ginger on Alloxan-induced and Insulin-resistant Diabetic for male patients. True experimental design was adopted and 100 samples were selected by using simple random technique. 500ml of Ginger tea was administered orally for a period of 4 weeks. The result of the study clearly shows that 500 ml of ginger tea had hypoglycemic effect in Diabetic Mellitus patients and has high antioxidant activity.

Chuah SK et.al.,(2009) conducted a randomized study to assess the Effect of Ginger tea on patients with functional dyspepsia in Mangalore. Randomized double blind true experimental design was adapted in this study. 9 patients with functional dyspepsia were studied. Simple random sampling technique was used in this study. 50ml of ginger tea was given. The study findings revealed that ginger tea accelerated gastric emptying and stimulated antral contractions in 89% of patients with functional dyspepsia.

Ghayur et.al,(2007)conducted a comparative study to assess the effectiveness of ginger tea on nausea and vomiting among pregnant women in Sahib Behest Hospital in Iran. True experimental design was used in this study .70 healthy, pregnant woman samples were selected. Data were collected by using a 10 point visual analogue scale. 100ml of ginger tea was given 4 times daily for 4 days to all selected samples. The study findings revealed that women in the ginger group

reported 60% significantly greater improvement in nausea and vomiting than women in the placebo group.

Rouhi H, et.al, (2006) conducted a longitudinal study to assess the effectiveness of Ginger tea on the improvement of Asthma in Iran. A randomized, placebo-controlled clinical trial design was used. 92 samples were selected by purposive sampling technique. The data were collected by using spirometry readings.150 ml of ginger tea was given to all selected samples. The result indicated that ginger tea was effective in reducing symptoms of asthma in 70 % of the samples.

Chaiyakunapruk N,et.al, (2006) department of Pharmacy Practice Conducted a longitudinal study on effects of ginger tea among post operative Hernia patients in Naresuan University at Thailand. The randomized controlled trial, true experimental design was adopted. A total 363 patients were selected by using simple random sampling technique. Data were collected by using postoperative assessment questionnaires. 30 ml of ginger tea was given to all patients. The study findings revealed that 30ml of ginger tea was effective in reducing postoperative nausea and vomiting among 80 % of hernia patients.

Bryer, et.al,(2005) conducted a comparative study to assess the effectiveness of ginger tea and vitamin B6 on treating nausea and vomiting during pregnancy in Delhi. The randomized clinical trial design was used in this study. 200 samples were selected in that Ginger tea was given to 67samples and vitamin B6 given to another 67 samples and 66 samples in control group. The data were collected by self recorded

symptoms according to the Rhodes index .The study findings concluded that the use of ginger tea is more effective option comparable to vitamin B6.

Kim H.D et.al,(2002) conducted an experimental study on the effectiveness of ginger for Alzheimer's disease among the elderly in Hong Kong . Quasi experimental design was adopted .200 samples were selected. The intervention was given at 6 times per day. The study concluded that ginger was an alternative method for symptoms of Alzheimer's disease among elderly.

Koo.K.Let.al.,(2001) conducted a comparative study on Effect of Ginger tea and related analogues inhibit arachidonic acid-induced human platelet serotonin release and aggregation in medical university hospital USA. Quasi experimental with 100samples were enrolled by simple random sampling technique. These results provide a basis for the design of more potent 70% effective ginger tea compare to analogues, with similar potencies to aspirin.

Doecke C.J (2000) conducted a descriptive study on efficacy of ginger tea for the prevention of postoperative nausea and vomiting among appendectomy patients Flinders medical centre at Bedford Park. Double-blind, randomized, and controlled trial design was used in this study. 70 patients were undergoing appendectomy surgery under general anesthesia. Patients were assessed by 35 item anonymous questionnaires. Administered 10ml of ginger tea. The study concluded that ginger tea is 69.74% effective in reducing the incidence of postoperative nausea and vomiting.

Studies Related to Effectiveness of ginger Tea in reducing the Primary Dysmenorrhoea.

Warda Naseem et.al, (2013) conducted an experimental study to assess the effectiveness of ginger tea on primary dysmenorrhoea and stress among adolescent girls in New Delhi. True experimental design was used. 194 samples were selected by using simple random sampling technique. Data were collected by Modified Menstrual Distress Questionnaire and Numerical pain scale. 150 ml of Ginger tea has given at three times per day for three days. The study result revealed that 150ml ginger tea is one of the effective methods to relieve the primary dysmenorrhoea reduction of 88% had complete relief pain and 12% reported mild pain has emphasized.

Gumanga s.k. et.al.,(2010) conducted a longitudinal study to evaluate the effect of ginger tea on primary dysmenorrhoea among female students at a college in Iran. A randomized controlled pre and post test design was used. A total of 30 female students with primary dysmenorrhoea were selected by using simple random technique. The data was collected by using visual analogue scale to measure pain and to assess its effect.100ml of Ginger tea has given at four times per day for two days of menstruation. The study concluded that ginger tea 100ml can be an 85% effective nursing intervention for alleviating primary dysmenorrhoea and its effects lasts for 1hrs of intervention.

Fakhsheena et.al,(2009) conducted a comparative study on to assess the effectiveness of ginger tea , mefanamic and ibuprofen on pain in girls with primary

dysmenorrhoea among medical university girls at Pakistan . True experimental design was used in this study. 150 samples were selected by simple random sampling technique. The data were collected by verbal multidimensional scoring system.250ml of ginger tea given at five times per day for two days to 50samples, mefanamic 250 mg TID given to second 50samples, and ibuprofen 250mg BD given to third 50 samples. The study concluded that ginger tea was 85% effective in treating primary dysmenorrhoea compare to 7% mefanamic acid and 8% ibuprofen.

Shumaila et.al,(2008) conducted a randomized controlled clinical study on ginger tea to reduce primary dysmenorrhoea among college students in Bangalore. True experimental design was adapted and a total of 500 samples were selected by using simple random sampling technique. The data was collected by using Likert scale. 500ml of ginger tea has given at four times per day for two days. The study results concluded that 500ml of ginger tea was 90% effective for in reducing primary dysmenorrhoea.

Holtmann et.al,(2006) conducted a double-blind prospective study on ginger tea treatment for primary dysmenorrhoea among adolescent girls in a secondary school in Accra. Pre experimental design was adopted .100 samples were selected by using purposive sampling technique. The data were collected by using Likert scale.400ml of Ginger tea given at four times per day for four month. The study results revealed that primary dysmenorrhoea were reduced by 77% and 63%, respectively. The study concluded that 400ml of ginger tea could be used to relieve primary dysmenorrhoea.

Noor Jagan et.al,(2003) conducted an explorative study on effectiveness of ginger tea in reducing primary dysmenorrhoea among school girls in cochin. Quasi experimental design was used in this study. Total 209 samples were selected by purposive sampling technique. The data were collected by using visual analogue scale.250ml of Ginger tea has given at four times per day for three days. The study revealed that 250ml of ginger tea was 95.24% effective in relieving primary dysmenorrhoea.

Albertazzi et.al,(2001) conducted a comparative study to assess the effect of ginger tea Vs placebo in reducing primary dysmenorrhoea of different universities in Karachi. Randomized, double-blind, placebo-controlled trial design was used in this study. 104 samples were selected. The data were collected by using menstrual distress questionnaires (MMDQ). 400ml of Ginger tea has given at four times per day for three days. The study concluded that 400ml of ginger tea has 78% effective in primary dysmenorrhoea with less menstrual blood loss compared to placebo group.

AmarjeetSingh. et.al.,(2001) conducted a randomized, double-blind, placebo-controlled trial of ginger tea and placebo in the management of primary dysmenorrhoea in school girls of Karnataka. Randomized double blind controlled trial design was used. 200 students were selected by convenient sampling technique. The data was collected by using MDQ and VAS.100ml of Ginger tea given at two times per day for 3days placebo 250 mg given two times per day for 3 days. The study concluded that there is a evidence that ginger tea is 89% effective in reducing primary dysmenorrhoea and placebo 11% effective in treating primary dysmenorrhoea.

CONCEPTUAL FRAMEWORK

MODIFIED ORLANDO'S NURSING PROCESS MODEL

Tabot (1995) stated that conceptual framework is a network of interrelated changes that provide a structure for organizing and describing the phenomenon of interest Research studies are based on the theoretical or conceptual framework that facilitate visualizing the problem and places the variables in a logical context.

The present study aims at evaluating the effectiveness of ginger tea in reducing Primary Dysmenorrhoea. Conceptual Framework of the present study is based on **Modified Orlando's Nursing Process Model. (1950)**

The nursing process is used to diagnose and treat human responses to health and illness (ANA 1980). The nursing process provide a creative, organized structure and framework for the delivery of nursing care, yet it is flexible enough to be used in all setting

Nursing Process Includes Five Steps:

- Assessment.
- Diagnosis.
- Planning.
- Implementation
- Evaluation

ASSESSMENT;

The systematic collection ,verification ,analysis and communication of data about a client .The collected data are in descriptive concise and complete form .The nurse obtain two types of data ,subjective data and objective data .Subjective data are clients perception and about their health problem .Objective data are observation or measurement made by the data collector. The data are obtained from the client, family, significant others health care team members.

In this study the researcher collected subjective data by using Standardized Visual Analogue Scale and assessed the level of Primary Dysmenorrhea among Adolescent Girls.

DIAGNOSIS

Nursing diagnosis is a clinical judgment about individual, family, or community responses to actual or potential health problems of life processes. It is a process of using the data gathered about a client to logically explain a clinical judgment in this case making a nursing diagnosis.

Here the researcher diagnosed the actual problem of the menstruating adolescents which is the primary dysmenorrhoea. The level of the dysmenorrhoea was assessed based on the score , 0-No pain, 2-Mild pain, 4 – Moderate pain, 6- Strong pain, 8- Very severe pain, 10- Worst possible pain.

PLANNING:

Setting goals to improve the outcome is primary focuses of the nursing process. Goals provide direction for individualized nursing intervention and sets standard of determining the effects of the interventions.

The goal of the present study was to reduce the Level of Primary Dysmenorrhea. Here the researcher planned to provide Ginger Tea to Adolescent Girls with Primary Dysmenorrhoea during the period of menstruation.

IMPLEMENTATION

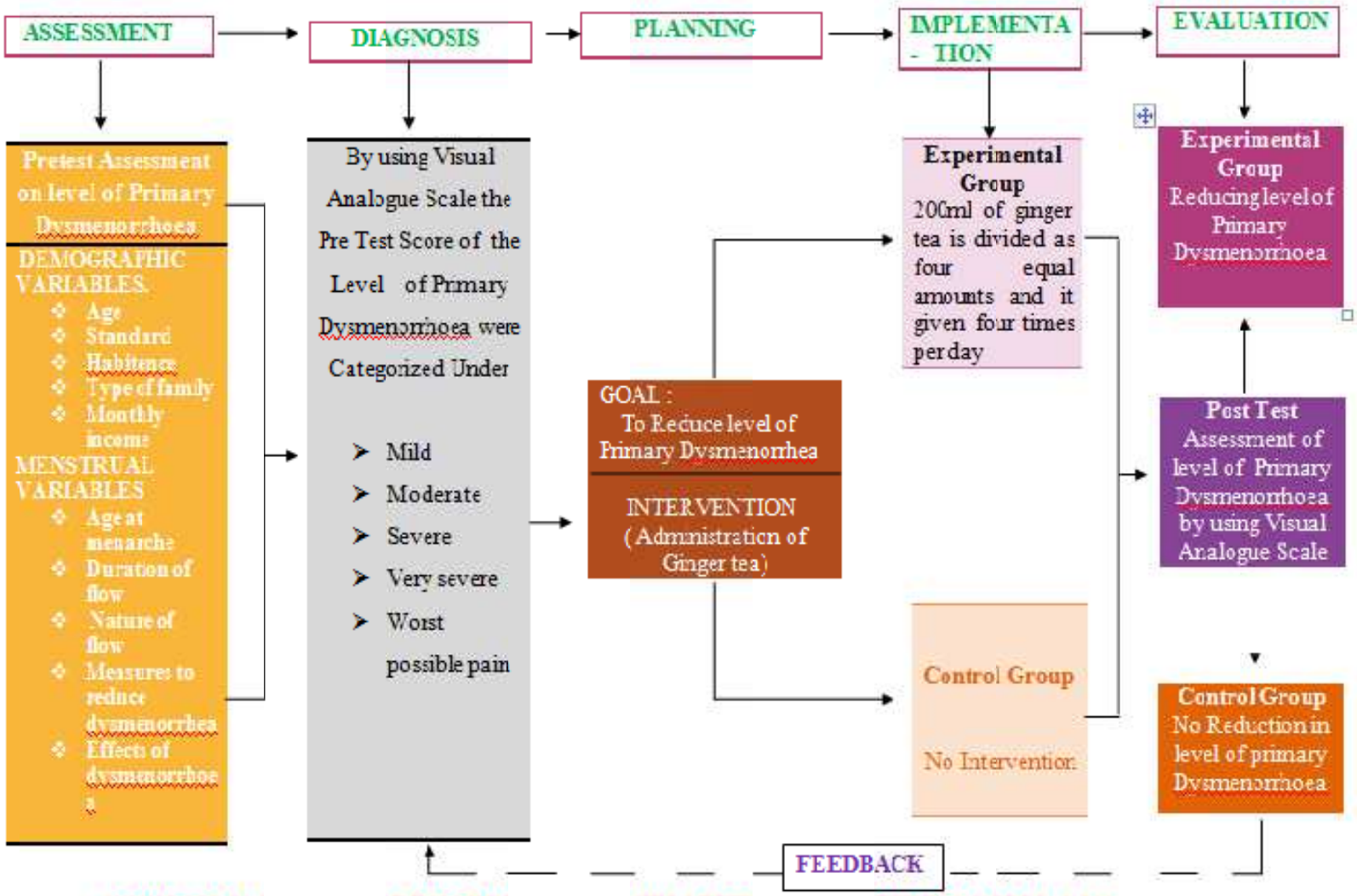
Implementation describes a category of nursing behaviors in which the action necessary for achieving the goals and expected outcomes of nursing care are initiated and completed .It is a continuous process and interaction with the other components of the nursing process. Intervention is any action taken by the nurse to help the client move from a present health state described in the expected outcome.

In this study the intervention refers to administration of 200ml of ginger tea was given at four times per day for 3 consecutive days.

EVALUATION

The evaluation step of the nursing process measures the clients' response to nursing actions and the clients' progress toward achieving goals. It is an ongoing process evaluation involves not only analyzing the success or failure of the current goals and intervention, but examines the need for adjustments and changes as well.

Post test assessment was done by using standardized visual analogue scale.



CONCEPTUAL FRAMEWORK BASED ON MODIFIED ORLANDO'S NURSING PROCESS MODEL (1950)

CHAPTER III

METHODOLOGY

Research methodology is one of the vital section of a research. Since the success of any research is mostly dependent upon the methodological issues that are followed in the execution of the research work. The role of methodology consists of procedure and technique for conducting the study.

Crotty (1998) defined research methodology as the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes.

The present chapter consists of research design, setting of the study, population of the study, sample, sampling technique and criteria for sample selection, development and description of the tool, scoring procedure, intervention, validity, reliability, pilot study, data collection and plan for data analysis and protection of human rights.

Research Approach

Cress well (2007) illustrating the research approach as an effective strategy to increase the validity of social research.

A quantitative approach was used to determine the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls.

Research Design

Donald R. Cooper had defined research design as the blue print for collection, measurement and analysis of data. It aids the scientist in allocation of his limited resources by posing crucial choices.

A True-experimental pre and post-test with control group design was chosen for analyzing the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls in selected Govt Higher Secondary School at Theni.

Group	Pre-test	Intervention	Post- test
Experimental Group	O_1	X	O_2
Control Group	O_1	-	O_2

Key:

O_1 = Pre test assessment on level of Primary Dysmenorrhoea among Adolescent Girls.

X = Administration of 200ml of Ginger tea for four times per day for 3 consecutive days.

O_2 = Post test assessment on level of Primary Dysmenorrhoea among Adolescent Girls.

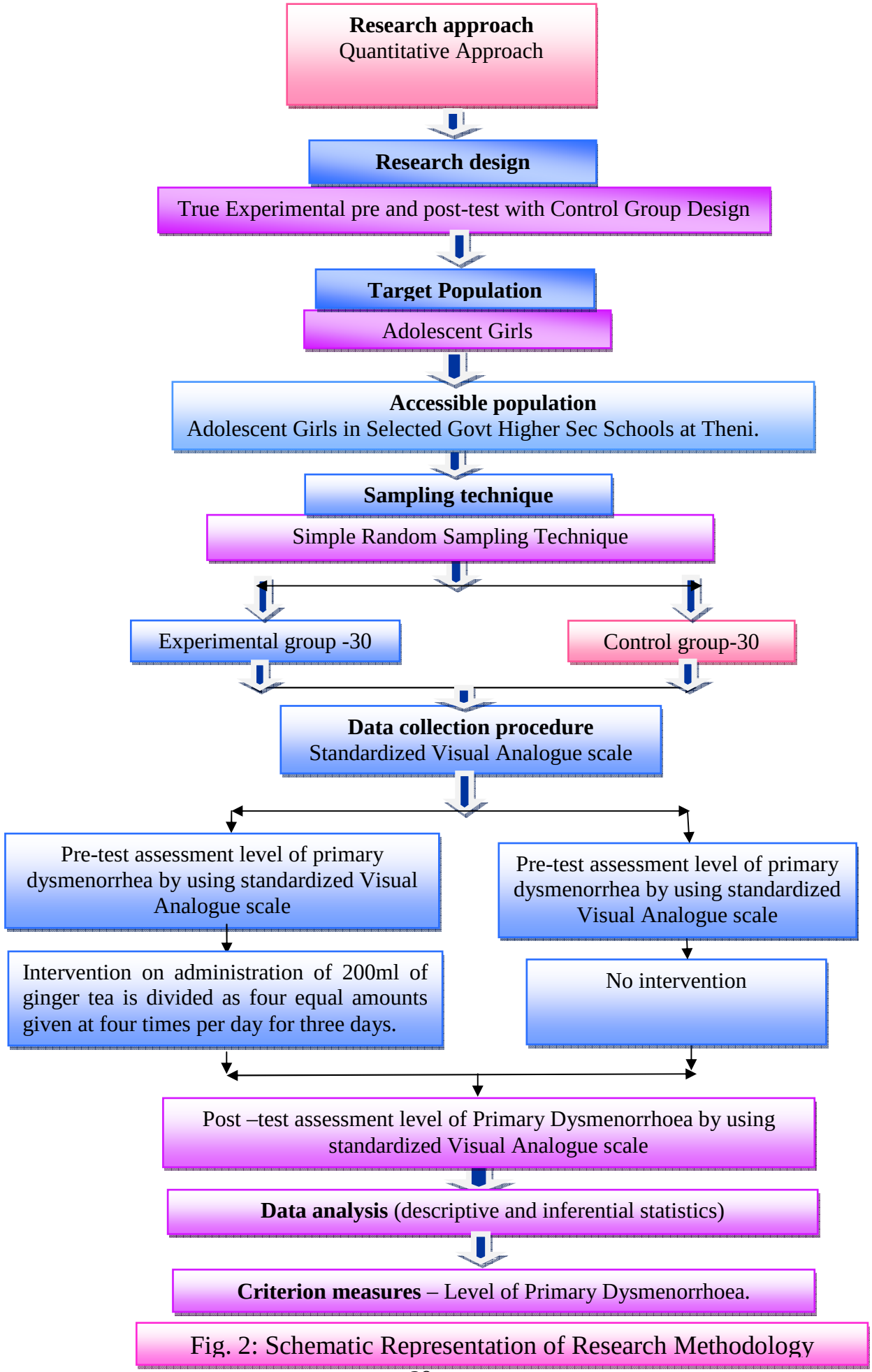


Fig. 2: Schematic Representation of Research Methodology

Variable

Chin and Kramer stated that “variables are concepts at different level of abstraction that are concisely defined to promote their measurement or manipulation within study”.

Independent variable

It is a stimulus or activity that is manipulated or varied by the research to create the effect on the dependent variable.

In this present study the independent variable is administration of ginger tea.

Dependent variable

It is the outcome or response due to the effect of the independent variable, which researcher wants to predict or explain.

In this study the dependent variable is level of primary dysmenorrhoea among adolescent girls.

Setting of the study

Polit and Hungler, (2004) stated that the physical location and condition in which data collection has taken place in a study is the setting of the study.

The study was conducted at Government Higher Secondary School, Lakshmipuram and Saruthuppatty at Theni, which comes under Theni district educational division.

Population of the Study

According to Polit and Hungler (2005) “A population is the entire aggregation of cases in which a researcher is interested”.

Target Population

Target population of this study was adolescent girls. The accessible population of the study was adolescent girls in selected Government Higher Secondary Schools at Theni.

Sample

According to Polit and Hungler (2005) the sample consists of a sub set of population selected to participate in a research study.

A total number of 60 samples who fulfilled the inclusion criteria were selected for the study. Among those the 30 Adolescent girls were selected with primary dysmenorrhoea in Goverment Higher Secondary School at Lakshmipuram for experimental group and 30 adolescent girls were selected with primary dysmenorrhoea in Government Higher Secondary school at Saruthuppatty for control group.

Sampling Technique

Polit and Beck (2005) defines the sampling technique as the process of selecting representative units of a population.

The samples were selected for this study by adopting a simple random sampling technique. The investigator screened all the students from 6^{th} to 12^{th} standard by a screening checklist and identified the samples based on inclusion and exclusion criteria.

Criteria for Sample Selection

The sample were selected with the following inclusion and exclusion criteria

Inclusion Criteria

- Adolescent girls who are in the age group of 12-18years.
- Adolescent girls who have attained menarche.
- Adolescent girls who had regular menstrual cycle.
- Adolescent girls who are having primary dysmenorrhoea.
- Adolescent girls who are willing to participate.

Exclusion criteria

- Adolescent girls who are under treatment for any pelvic disease.
- Adolescent girls who are having allergy towards ginger.

Development of the Tool

Treece and Treece (1960) emphasized that the instrument in research should as far as possible be the vehicle that would best obtain data for drawing conclusion.

Description of the Tool

The tool consisted of two parts.

Part I: It consists of demographic variables that includes 2 sections

a. Personal profile: It consists of demographic variables such as Age, Standard, Habitance, Type of family, Monthly income.
b. Menstrual variables: It includes Age at menarche, Duration of flow, Nature of flow, Measure to reduce dysmenorrhoea, Effects of dysmenorrhoea.

Part II:

Standardized visual analogue scale was used to assess the level of primary dysmenorrhoea. The score ranges from 0-10 and the scoring procedure are as per the following.

The primary dysmenorrhoea is classified as follows per visual analogue scale

0	No pain
2	Mild pain
4	Moderate pain
6	Severe pain
8	Very severe pain
10	Worst possible pain

Intervention

The Ginger tea was prepared by boiling 250mg of peeled ginger in 200ml of water for 10 mts. The extract was divided into four equal parts and was administered four times per day at two hours interval from the first day of menstruation for three consecutive days.

Validity and Reliability

Content Validity

According to Burns and Groove, (2005) “the validity of an instrument is the determination of the extent to which the instrument reflect the abstract constant that is being examined”.

The tool was evaluated by 9 experts including six nursing experts, one expert in gynecologist, one expert in medicine and one expert in dietician who validated the tool regarding adequacy of the content and the sequence in framing of questions. Based on their valid suggestions necessary modifications were made.

Reliability

Brink (1985) stated that reliability refers to the consistency, stability, and reliability of a data collection instrument.

Reliability was established through test-retest method. The tool was administered to 5 samples. According to the test-retest obtained the ‘r’ value is

r = 0.93 which shows that the tool was reliable.

Pilot Study

Polit and Hungler (1999) denote that the pilot study is a small scale version or trial run done in preparation of main study.

In order to test the feasibility, relevance and practicability of the study, pilot study was conducted among 10 Adolescent girls in Government Higher Secondary

School at Mathukarai. The pilot study findings revealed that the mean pre test score on level of primary dysmenorrhoea was 6.7 and the post test score on level of primary dysmenorrhoea was 4.3 .The calculated mean difference was 2.4 and obtained 't' value for effectiveness of ginger tea in reducing primary dysmenorrhoea was 2.262* which was significant at $p< 0.05$ level. The pilot study results showed that the setting, samples and tool was feasible enough to conduct the main study.

Data Collection Procedure

A prior permission was obtained from the District Education Officer at Theni. Parents were informed about the purpose and the nature of the study and obtained consent from the parents of the samples. The study was conducted for period of 4 days. According to sample selection criteria 60 samples were selected among them 30 samples were selected for experimental group in Government higher secondary school at Lakshmipuram, and pre test on level of primary dysmenorrhoea was assessed by using standardized visual analogue scale. 200ml of Ginger tea was administered 4 times a day with an interval of 2hours for 3 consecutive days. After one hour of administration of ginger tea post test was done by using standardized visual analogue scale. Same procedure was done in control group but only the intervention was not given.

Plan for Data Analysis

The data were analyzed by using both descriptive and inferential statistics. The data related to demographic variables are analyzed by using descriptive statistics. The level of primary dysmenorrhoea was analyzed by using descriptive statistics. (Mean, Standard Deviation). The effectiveness of ginger tea in reducing the level of primary

dysmenorrhoea was analyzed by using inferential statistics (paired‘t’ test and independent‘t’ test). Association was analyzed using Chi-square test.

Protection of Human Rights

The study was conducted after the approval of research committee in the college. The nature and purpose of the study was explained to the teachers and parents of the samples. Written consent was obtained from the parents of all the study samples. Anonymity and confidentiality was maintained throughout the study.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the collected data from 60 adolescent girls to evaluate the effectiveness of ginger tea in reducing the level of primary dysmenorrhoea among adolescent girls.

The purpose of analysis was to reduce the data to a manageable and interpretable from so that the research problem can be studied and tested. The analysis and interpretation of data of the study are based on data collected through structured interview questionnaire. The results were computed by using descriptive and inferential statistics.

Polit and Beck, (2003) has noted data analysis as the systematic organization, synthesis of research data and testing of research hypothesis by using those data.

Interpretation defined as examine the result from data analysis, forming, conclusions, considering implication for nursing, exploring significance of the finding and suggesting the study.

The study findings are presented in section as follows:

Section I: Data on demographic variables of adolescent girls with primary Dysmenorrhoea

Section II: Data on level of primary dysmenorrhoea among adolescent girls in experimental and control group.

Section III: Data on effectiveness of ginger tea on level of Primary dysmenorrhoea among adolescent girls in experimental group.

Section IV: Data on association between post-test levels of primary dysmenorrhoea among adolescent girls with their selected demographic variables.

SECTION I: DATA ON DEMOGRAPHIC VARIABLES OF ADOLESCENT GIRLS WITH PRIMARY DYSMENORRHOEA

Table: 1

Frequency and Percentage Distribution of Primary Dysmenorrhoea among Adolescent Girls with their selected Demographic Variables

N=60

S. NO	Demographic variables	Experimental group		Control group		Total	
		f	%	f	%	f	%
	A.PERSONAL PROFILE						
1	Age (years)						
	a)12-14	16	53	17	57	33	55
	b)15-18	14	47	13	43	27	45
2	Standard						
	a)6^{th} -9^{th}	14	47	17	57	31	50
	b)10^{th} -12^{th}	16	53	13	43	29	50
3	Habitance						
	a)Rural area	4	13	3	10	7	12
	b)Urban area	26	87	27	90	53	88
4	Type of family						
	a)Nuclear family	17	57	24	80	41	68
	b)Joint family	10	33	6	20	16	27
	c)Extended family	3	10	0	0	3	5
5	Monthly income						
	a)Less than RS 2000/-	0	0	4	13	4	7
	b)RS 2001-5000/-	19	63	7	23	26	43
	c)Above5001/-	11	37	19	64	30	50

(Cont…..)

S.NO	Demographic variables	Experimental group		Control group		Total	
		f	%	f	%	f	%
	B.MENSTRUAL VARIABLES						
6	Age at menarche(years)						
	a)Before 10	3	10	0	0	3	5
	b)11-13years	21	70	18	60	39	65
	c)14-16years	6	20	12	40	18	30
	d)After 16years	0	0	0	0	0	0
7	Duration of flow						
	a)2-5 days	10	33	12	40	22	37
	b)6-10days	20	67	18	60	38	63
	c)More than 10 days	0	0	0	0	0	0
8	Nature of flow						
	a)Scanty	3	10	4	13	7	12
	b)Moderate	13	43	9	30	22	37
	c)Excess	14	47	17	57	31	51
9	Measures to reduce Primary Dysmenorrhoea						
	a)Taking rest	4	13	5	17	9	15
	b)Medicine	3	10	0	0	3	5
	c)Any other	8	27	8	27	16	27
	d)No measures	15	50	17	56	33	53
10	Effect of Primay dysmenorrhoea						
	a)Not taking bath	4	13	6	20	10	17
	b)Difficult to walk	9	30	17	57	26	43
	c)Cant able to sleep	2	7	0	0	2	3
	d) Any other.	15	50	7	23	22	37

Table 1: Revealed that with regard to age, in experimental group majority of adolescent girls 16(53%) comes under 12-14 years, 14(47%) comes under 15-18 years, and in control group, majority of adolescent girls 17(57%) comes under 12-14 years, 13(43%) comes under 15-18years.

Regarding standard in experimental group majority of adolescent girls 16(53%) were studying in 10^{th} -12^{th} standard, 14(47%) were studying in 6^{th} -9^{th} standard, and in control group, majority of adolescent girls 17(57%) were studying in 6^{th} -9^{th} standard, 13(43%) were studying in 10^{th} -12^{th} standard.

Regarding habitance in experimental group majority of adolescent girls 26(87%) were from urban area, 4(13.3%) were from rural area and in control group majority of adolescent girls 27(90%) were from urban area, 3(10%) were from rural area.

Regarding type of family in experimental group majority of adolescent girls 17(57%) were belongs to nuclear family, 10(33%) were belongs to joint family, 3(10%) were belongs to extended family and in the control group majority of adolescent girls 24(80%) were belongs to nuclear family,6(20%) were belongs to joint family.

Regarding monthly income in experimental group majority of adolescent girls 19(63%) had RS 2001-5000 monthly income, 11(37%) had from RS 5000/- and in

control group, majority of adolescent girls 19(64%) had RS above 5000/-, 7(23%) had RS 2001-5000/- and 4(13%) had RS 2000/-.

Regarding age at menarche, in experimental group majority of adolescent girls 21(70%) attained menarche at 11-13 years, 6(20%) attained menarche at 14-16 years, 3(10%) attained menarche at before 10 years, whereas in the control group majority of adolescent girls 18(60%) attained menarche at 11-13 years, 12(40%) attained menarche at 14-16.

Regarding duration of flow, in experimental group majority of adolescent girls 20(67%) had 6-10 days of flow, 10(33%) had 2-5 days of flow and in the control group, majority of adolescent girls 18(60%) had 6-10 days of flow, 12(40%) had 2-5 days of flow.

Regarding nature of flow, in experimental group majority of adolescent girls 14(47%) had excess of flow, 13(43%) had moderate flow and 3(10%) had scanty of flow whereas in control group, majority of adolescent girls 17(57) had excess of flow, 9(30%) had moderate of flow, and 4(13%) had scanty of flow.

Regarding measures to reduce dysmenorrhoea in experimental group majority of adolescent girls 15(50%) have taking no measures, 8(27) have taking other measures, 3(10) have taking medicine,4(13%) have taking rest, whereas in control group majority of adolescent girls 17(56%) have taking no measures,8(27%)have taking other measures,5(17%)have taking rest.

Regarding effects of dysmenorrhoea in experimental group majority of adolescent girls 15(50%) have any other effects, 9(30%) have difficult to walk, 4 (13%) not taking bath, 2(7%) have cant able to sleep, where's in control group majority of adolescent girls 17(57%) have difficult to walk, 7 (23%) have any other measures, 6(20%) not taking bath.

SECTION II: DATA ON LEVEL OFPRIMARY DYSMENORRHOEA AMONG ADOLESCENT GIRLS

Table: 2.1

Frequency and Percentage Distribution of Pre-Test and Post –Test Level of Primary Dysmenorrhoea among Adolescent Girls in Experimental Group

N=30

S.No.	Level of Primary dysmenorrhoea	Experimental Group			
		Pre-test		Post-test	
		f	%	f	%
1.	Mild	0	0	17	57
2.	Moderate	0	0	13	43
3.	Severe	21	70	0	0
4.	Very severe	9	30	0	0

The table 2.1, reveals that in experimental group pre test level of primary dysmenorrhoea majority of adolescent girls 21 (70%) had severe dysmenorrhoea,9 (30%) had very severe dysmenorrhoea and post-test level of primary dysmenorrhoea, majority of adolescent girls 17 (57%) had mild dysmenorrhoea, 13(43%) had moderate dysmenorrhoea.

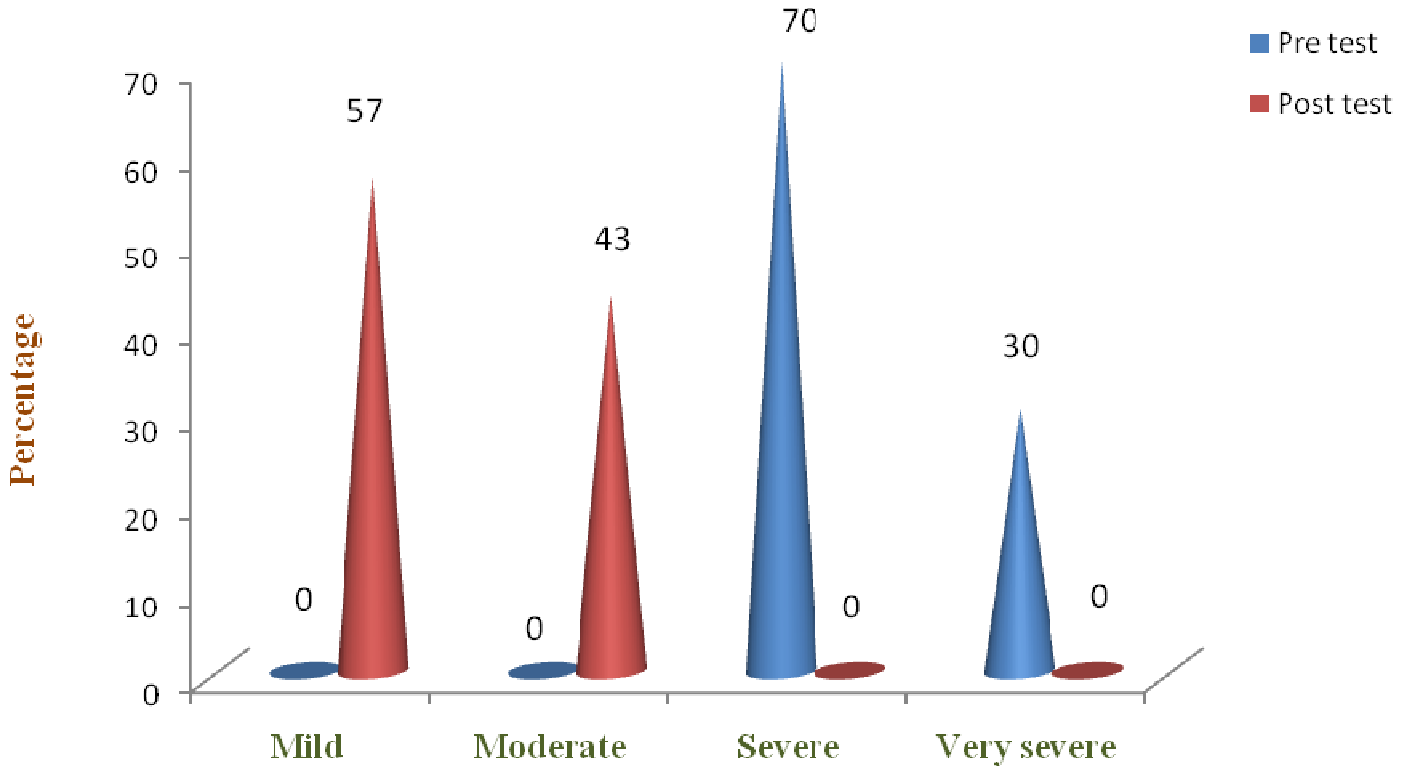


Figure :1 Percentage on Pre test Post test Level of Primary Dysmenorrhoea among Adolescent Girls in Experimental GIrls

Table: 2.2

Frequency and Percentage Distribution of Pre –Test and Post-Test Level of Primary Dysmenorrhoea among Adolescent Girls in Control Group

N=30

S.No.	Level of Primary Dysmenorrhoea	Control Group			
		Pre-test		Post-test	
		f	%	f	%
1.	Mild	0	0	0	0
2.	Moderate	0	0	0	0
3.	Severe	5	17	15	50
4.	Very severe	25	83	15	50

The table 2.2, reveals that in control group pre-test level of primary dysmenorrhoea majority of adolescent girls 5 (17%) had severe dysmenorrhoea ,25 (83%) had very severe dysmenorrhoea and in post-test level of primary dysmenorrhoea majority of adolescent girls 15 (50%) had very severe dysmenorrhoea, 15(50%) had severe dysmenorrhoea.

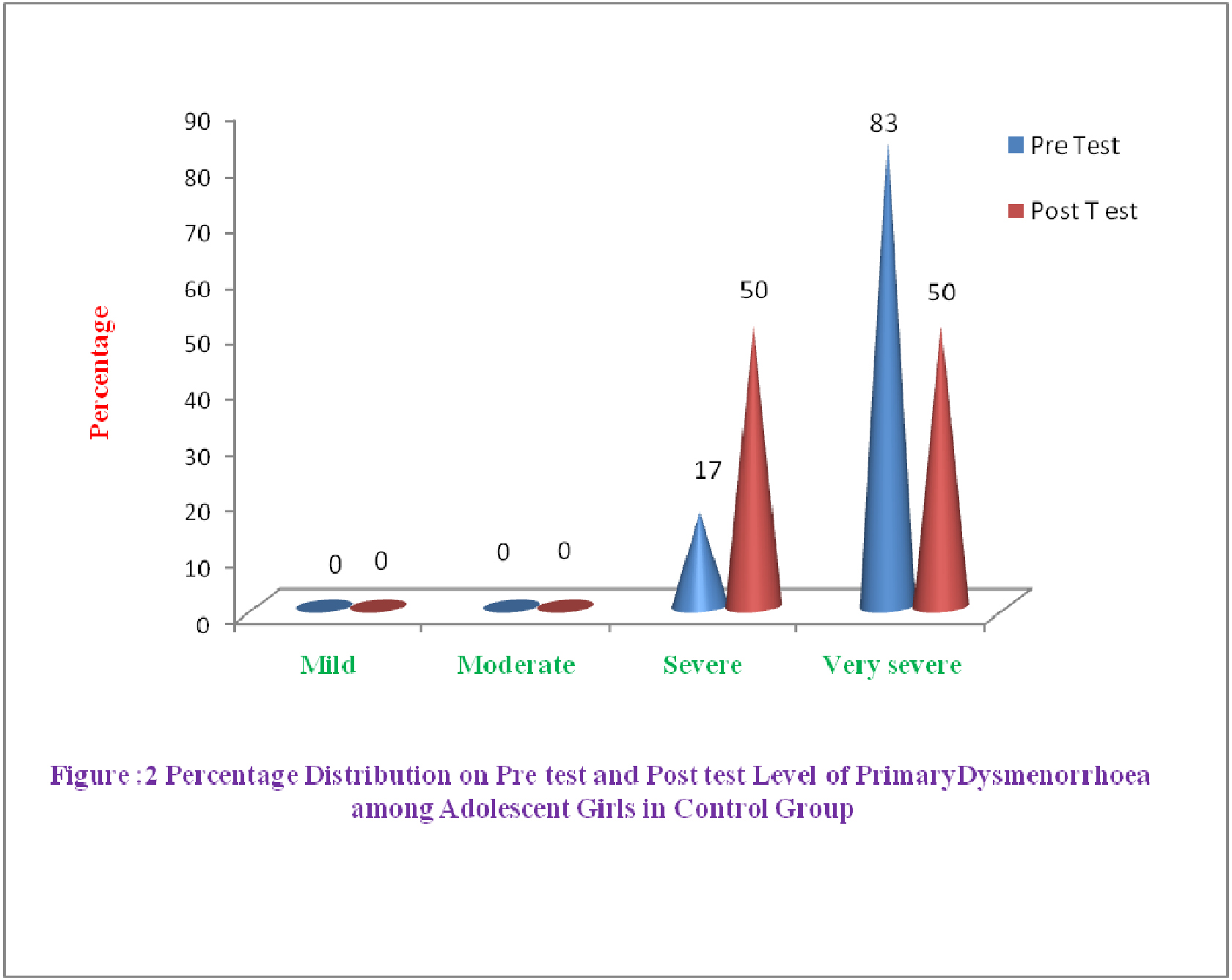


Figure :2 Percentage Distribution on Pre test and Post test Level of PrimaryDysmenorrhoea among Adolescent Girls in Control Group

SECTION III: DATA ON EFFECTIVENESS OF GINGER TEA IN REDUCING PRIMARY DYSMENORRHOEA AMONG ADOLESCENT GIRLS

Table: 3.1

Mean, Standard Deviation, Mean Difference and‘t’ Value of Pre-Test and Post-Test Scores of Level of Primary Dysmenorrhoea among Adolescent Girls in Experimental Group

N=30

S.NO	Experimental Group	Mean	SD	MD	‘t’ Value
1	Pre- test	6.2	0.42	3.3	21.39*
2	Post –test	2.9	0.53		

*Significant at p<0.05 levels

Table 3.1 reveals that in experimental group the mean pre-test score was 6.2 with standard deviation 0.42 and the mean post test score was 2.9 with the standard deviation 0.53. The mean difference was 3.3. The obtained‘t’ value 21.39 was significant at $p < 0.05$ (2.045) level. Hence, the stated hypothesis (H_1) is accepted in experimental group. Thus it is inferred that there is a significant difference between the mean pre and post test level of Primary Dysmenorrhoea among Adolescent Girls in experimental group.

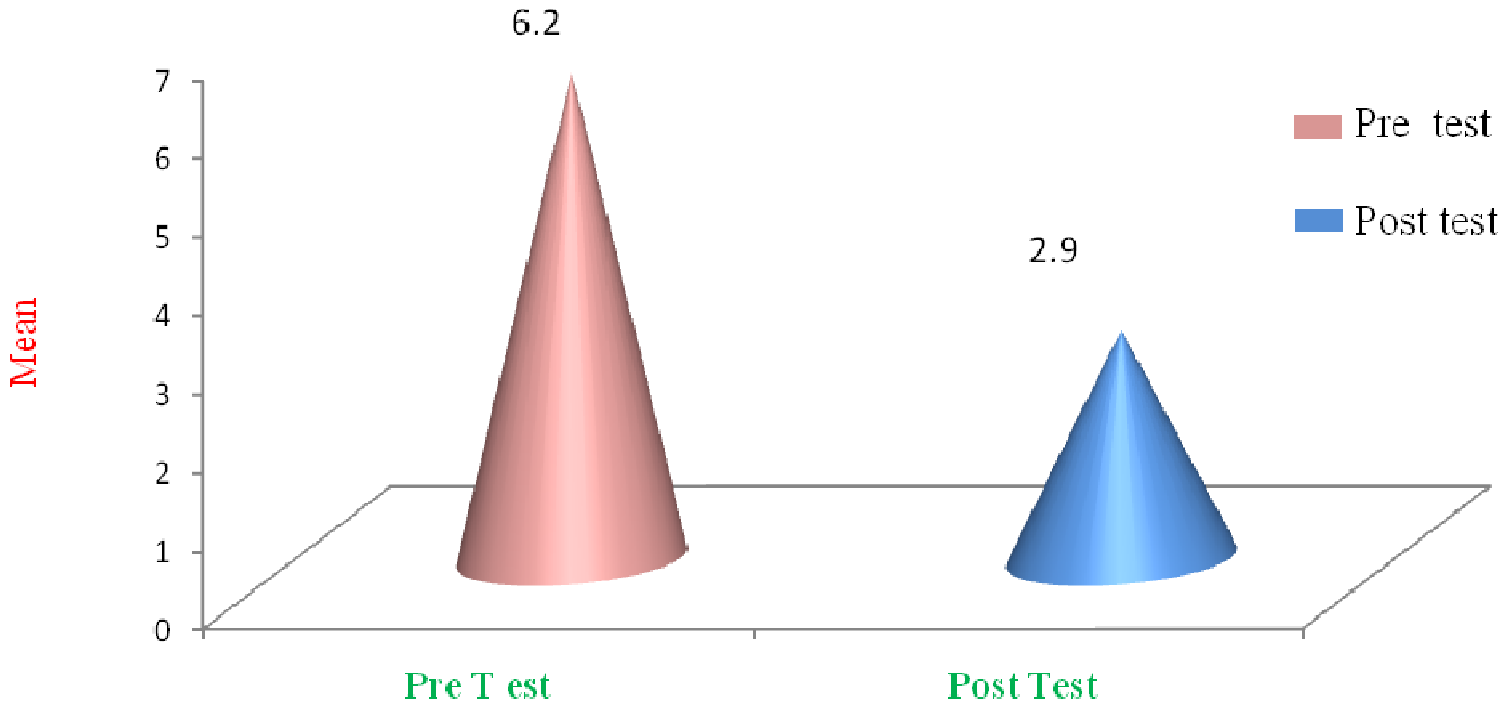


Figure:3 Mean Value of Pre test and Post test scores of Level of Primary Dysmenorrhoea among Aolescent Girls in Experimental Group

Table: 3.2

Mean, Standard Deviation, Mean Difference and‘t’ Value of Pre-Test and Post-Test Scores of Level of Primary Dysmenorrhoea among Adolescent Girls in Control Group

N=30

S.NO	Control Group	Mean	SD	MD	‘t’ Value
1	Pre test	6.6	0.62	0.1	32.22
2	Post test	6.7	0.78		

*Significant at p<0.05 levels

Table 3.2reveals that in control group the mean pre-test score was 6.6 with standard deviation 0.62 and the mean post test score was 6.7with the standard deviation 0.78. The mean difference was 0.1. The obtained‘t’ value 32.22 was not significant at $p < 0.05$. Hence, the stated hypothesis (H_1) is not accepted in control group.

Thus it is inferred that there is a no significant difference between the mean pre and post test level of Primary Dysmenorrhoea among Adolescent Girls in control group.

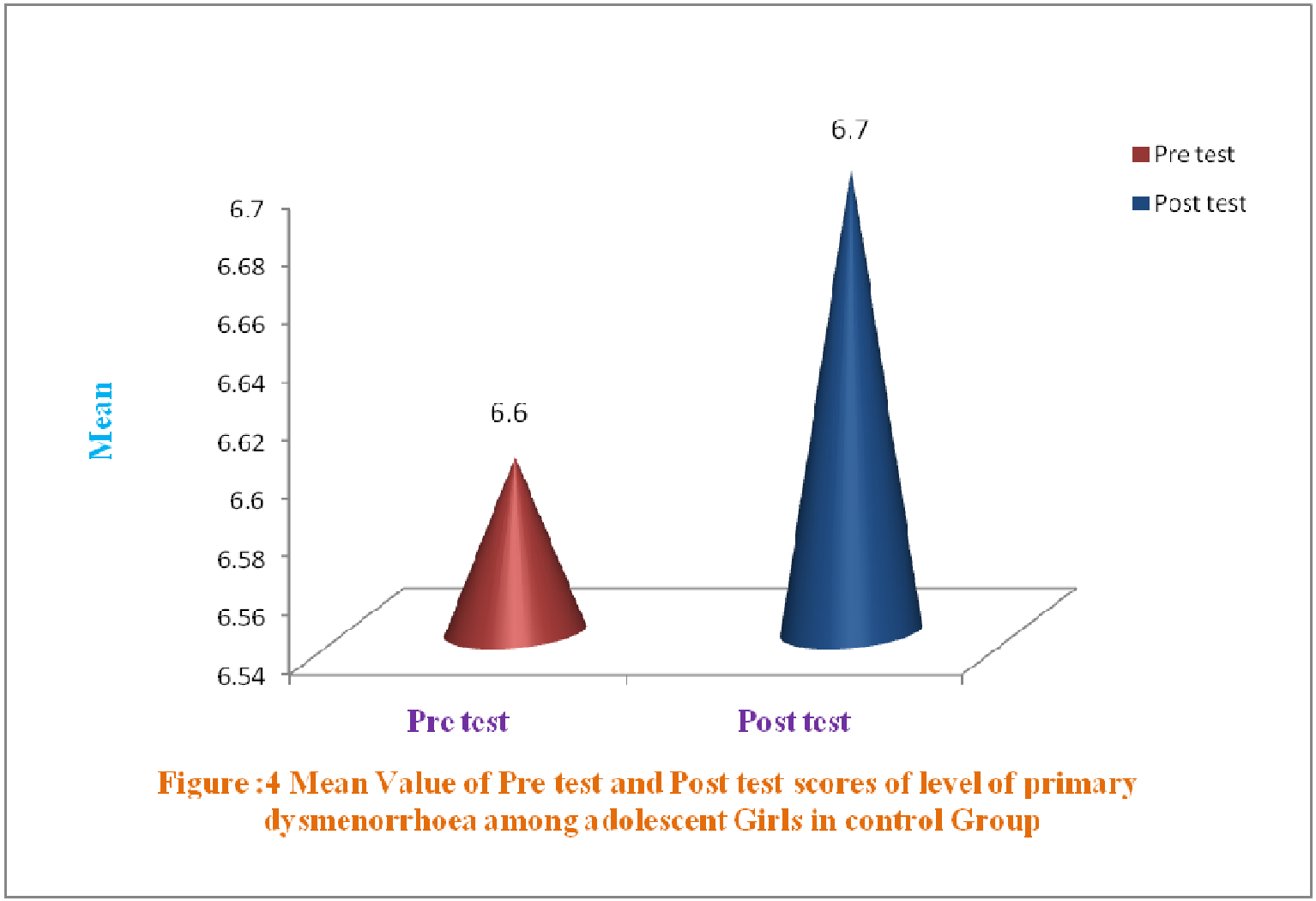


Figure :4 Mean Value of Pre test and Post test scores of level of primary dysmenorrhoea among adolescent Girls in control Group

Table: 3.3

Mean, Standard Deviation, Mean Difference and‘t’ Value of Post-Test Scores of Level of Primary Dysmenorrhoea among Adolescent Girls in Experimental and Control Group

N=60

S. No.	Variables	Mean	SD	MD	‘t’ Value
1	Experimental group	2.9	0.53	3.8	5.448*
2	Control group	6.7	0.78		

*Significant at p<0.05 levels

Table 3.2 shows that in experimental group the mean post test score was 2.9 with the standard deviation 0.53 and in control group, the mean post test score was 6.7 with the standard deviation 0.78. The calculated mean difference was 3.8.The obtained‘t’ value, 5.448 which was significant at $p < 0.05$ (1.960) level. It is inferred that the ginger tea was effective in reducing the Level of Primary Dysmenorrhoea among Adolescent Girls. Hence, the stated hypothesis (H_2) is accepted. Thus it is inferred that there is a significant difference between the mean post test level of Primary Dysmenorrhoea among Adolescent Girls in experimental group and control group.

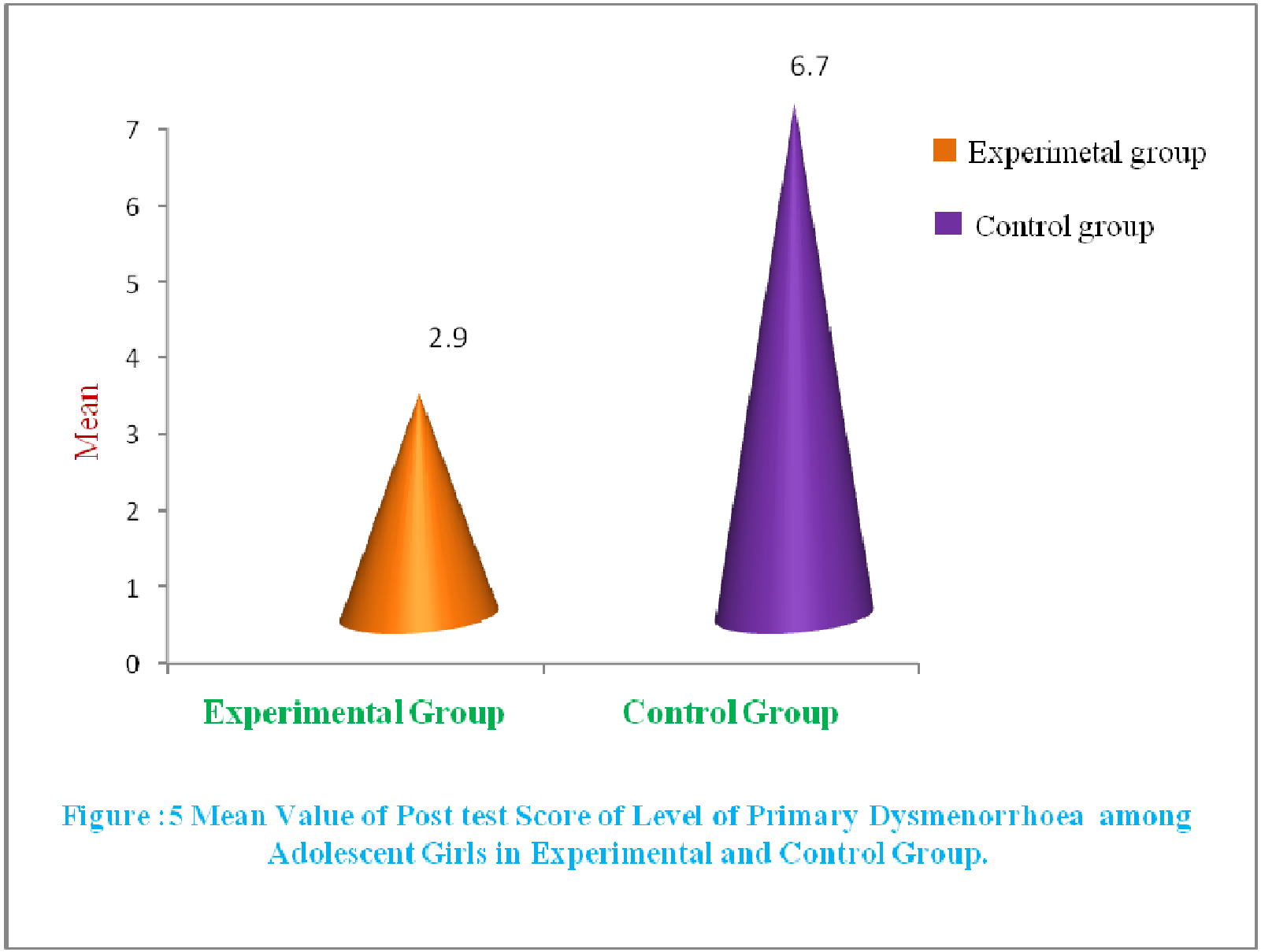


Figure :5 Mean Value of Post test Score of Level of Primary Dysmenorrhoea among Adolescent Girls in Experimental and Control Group.

SECTION IV: DATA ON ASSOCIATION BETWEEN POST TEST LEVEL OF PRIMARY DYSMENORRHOEA AMONG ADOLESCENT GIRLS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES.

Table: 4.1

Frequency and Percentage Distribution of post test level of Primary Dysmenorrhoea among Adolescent Girls in Experimental group with their selected demographic variables.

N=30

S.No	Demographic Variables	Level of Primary Dysmenorrhoea				X_2 Value
		Mild pain		Moderate pain		
		f	%	f	%	
	A.PERSONAL PROFILE					
1	Age (years)					
	a) 12-14	9	30	7	23.3	0^{NS}
	b) 15-18	8	27	6	20	df=1
2	Standard					
	a) 6^{th} -9^{th}	9	30	5	16	0.53^{NS}
	b) 10^{th} -12^{th}	8	27	8	27	df=1
3	Habitance					
	a) Rural area	3	10	1	3.3	1.15^{NS}
	b) Urban area	14	47	12	40	df=1
4	Type of family					
	a) Nuclear family	8	27	9	30	2.88^{NS}
	b) Joint family	7	23	3	10	df=2
	c) Extended family	3	10	0	0	
5	Monthly income					
	a) Less than RS2000/-	0	0	0	0	0^{NS}
	b) Rs2001-5000/-	11	37	8	27	df=1
	c) Above 5001/-	6	2	5	16	

(Cont..)

S.No	Demographic Variables	Levels of Primary Dysmenorrhoea				X_2 Value
		Mild pain		Moderate pain		
		f	%	f	%	
	B.MESTRUAL VARIABLES					
6	Age at menarche (years)					
	a) Before 10	0	0	3	10	8.6*
	b) 11-13 years	12	40	9	30	df=2
	c) 14-16 years	5	17	1	3.3	
	d) After 16 years	0	0	0	0	
7	Duration of flow					
	a) 2-5 day	6	20	4	13	0^{NS}
	b) 6-10 days	11	37	9	30	df=1
	c) More than 10 days	0	0	0	0	
8	Nature of flow					
	a) Scanty	3	10	0	0	
	b) Moderate	8	27	5	17	2.9^{NS}
	c) Excess	6	20	8	27	df=2
9	Measures to reduce Dysmenorrhoea					
	a) Taking rest	1	4	3	10	
	b) Medicine	2	7	1	4	4.57
	c) Any other	4	13	4	13	df=3
	d) No measures	10	33	5	16	
10	Effect of dysmenorrhoea					
	a) Not taking bath	3	10	1	3	
	b) Difficult to walk	5	17	4	13	2.64^{NS}
	c) Cant able to sleep	0	10	2	6	df=3
	d) Any other.	9	30	6	20	

NS= Non Significant

Table 4.1 envisages the substantive summary of chi-square analysis, which was used to bring out the association between the levels of primary dysmenorrhoea among adolescent girls in the experimental group with their selected demographic variables.

Regard to association between age with level of primary dysmenorrhoea, the obtained $\chi 2$ value was 0 and table value 3.84 at df (1) was not significant at $p<0.05$ level.

Regard to association between standard with level of primary dysmenorrhoea, the obtained $\chi 2$ value was 0.53 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between habitance with level of primary dysmenorrhoea the obtained $\chi 2$ value was 1.15 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between type of family with level of primary dysmenorrhoea the obtained $\chi 2$ value was 0 and table value 5.99 at df(2) was not significant at $p<0.05$ level.

Regard to association between monthly income with level of primary dysmenorrhoea the obtained $\chi 2$ value was 0 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between age menarche with level of primary dysmenorrhoea the obtained $\chi 2$ value 8.6* and table value 5.99 at df(2) was significant at $p<0.05$ level.

Regard to association between duration of flow with level of primary dysmenorrhoea the obtained $\chi 2$ value 0 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between nature of flow with level of primary dysmenorrhoea the obtained $\chi 2$ value 2.9 and table value 5.99 at df(2) was not significant at $p<0.05$ level.

Regard to association between measures to reduce dysmenorrhoea with level of primary dysemenorrhoea the obtained $\chi 2$ value 4.57 ad table value 7.81 at df(3) was not significant at $p<0.05$ level.

Regard to association between effects to reduce dysmenorrhoea with level of primary dysmenorrhoea the obtained $\chi 2$ value 2.64 and table value 7.81 at df(3 was not significant at $p<0.05$ level.

It was inferred that in experimental group there was no significant association between levels of primary dysmenorrhoea of adolescent girls with their selected demographic variables such as age, standard, habitance, type of family, monthly income, duration of flow, nature of flow, measures to reduce dysmenorrhoea, effects of dysmenorrhoea. In this age at menarche is significant at $p<0.05$level on primary dysmenorrhoea.

SECTION IV: DATA ON ASSOCIATION BETWEEN POST TESTS LEVELS OF PRIMARY DYSMENORRHOEA AMONG ADOLESCENT GIRLS WITH THEIR SELECTED DEMOGRAPHICVARIABLES.

Table: 4.2

Frequency and Percentage Distribution of level of Primary Dysmenorrhoea among Adolescent Girls in Control group with their selected Demographic Variables

N=60

S. NO	Demographic Variables	Levels of Primary Dysmenorrhoea				X_2 Value
		Severe		Very severe		
		f	%	f	%	
	A.PERSONAL PROFILE					
1	Age (years)					
	a)12-14	10	33	7	23	1.2^{NS} df=1
	b)15-18	5	17	8	27	
2	Standard					
	a)6^{th} -9^{th}	9	30	7	23	0.52^{NS} df=1
	b)10^{th} -12^{th}	6	20	8	27	
3	Habitance					
	a)Rural area	1	3	2	7	0.34^{NS} df=1
	b)Urban area	14	47	13	43	
4	Type of family					
	a)Nuclear family	12	40	12	40	0 df=2
	b)Joint family	3	10	3	10	
	c)Extended family	0	0	0	0	
5	Monthly income					
	a)Less than RS 2000/-	2	7	2	7	1.74 df=1
	b)RS 2001-5000/-	2	7	5	16	
	c)Above5001/-	11	37	8	26	

S. NO	Demographic Variables	Levels of Primary Dysmenorrhoea				X_2 Value
		Mild pain		Moderate pain		
		f	%	f	%	
	B.MENSTRUAL VARIABLES					
6	Age at menarche(years)					
	a)Before 10	0	0	0	0	
	b)11-13years	9	30	19	30	0^{NS} df=1
	c)14-16years	6	20	6	20	
	d)After 16years	0	0	0	0	
7	Duration of flow					
	a)2-5 days	7	23	5	17	
	b)6-10days	8	27	10	33	0.54^{NS} df=1
	c)More than 10 days	0	0	0	0	
8	Nature of flow					
	a)Scanty	3	10	1	3	
	b)Moderate	6	20	3	10	3.46^{NS} df=2
	c)Excess	6	20	11	37	
9	Measures to reduce Dysmenorrhoea					
	a)Taking rest	3	10	2	7	
	b)Medicine	0	0	0	0	1.22^{NS} df=2
	c)Any other	5	16	3	10	
	d)No measures	7	23	10	34	
10	Effect of dysmenorrhoea					
	a)Not taking bath	2	7	4	13	
	b)Difficult to walk	7	24	10	33	4.68^{NS} df=2
	c)Cant able to sleep	0	0	0	0	
	d) Any other..	6	20	1	3	

NS= Non Significant

Table 4.2 envisages the substantive summary of chi-square analysis, which was used to bring out the association between the levels of primary dysmenorrhoea in the control group with their selected demographic variables.

Regard to association between age with level of primary dysmenorrhoea the obtained $\chi 2$ value was 1.2 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between standard with level of primary dysmenorrhoea the obtained $\chi 2$ value 0.5 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between habitance with level of primary dysmenorrhoea the obtained $\chi 2$ value 0.34 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between type of family with level of primary dysmenorrhoea the obtained $\chi 2$ value was1.74 and table value 3.84 at df(2) was not significant at $p<0.05$ level.

Regard to association between monthly income with level of primary dysmenorrhoea the obtained $\chi 2$ value was 0 and table value 5.99 at df(2) was not significant at $p<0.05$ level.

Regard to association between age menarche with level of primary dysmenorrhoea the obtained $\chi 2$ value 0 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between duration of flow with level of primary dysmenorrhoea the obtained $\chi 2$ value 0.54 and table value 3.84 at df(1) was not significant at $p<0.05$ level.

Regard to association between nature of flow with level of primary dysmenorrhoea the obtained $\chi 2$ value 3.46 and table value 5.99 at df(2) was not significant at $p<0.05$ level.

Regard to association between measures to reduce dysmenorrhoea with level of primary dysmenorrhoea the obtained $\chi 2$ value 1.22 and table value 5.99 at df(2) shows no significance.

Regard to association between effects to reduce dysmenorrhoea with level of primary dysmenorrhoea the obtained $\chi 2$ value 4.68 and table value 5.99 at df(3) was not significant at $p<0.05$ level.

It was inferred that in control group there was no significant association between post-test levels of primary dysmenorrhoea with their variables such as age, standard, habitance, type of family, monthly income, age at menarche, duration of flow, nature of flow, measures to reduce dysmenorrhoea, effects of dysmenorrhoea.

CHAPTER V

DISCUSSION

The aim of the present study was to evaluate the effectiveness of Ginger tea in reducing level of primary dysmenorrhoea. The study was conducted by using a true-experimental pre test and post-test with control group design. The samples were selected from Government higher secondary school, in Saruthupatty and Lakshmipuram. Simple random sampling technique was used to select 60 samples, among which 30 samples were assigned in experimental group and remaining 30 samples were assigned to control group.

Visual analogue scale was used to assess the level of primary dysmenorrhoea. It is a 10 point scale ranging from 0 – 10. The score ‘0’ indicates the no pain and the score ‘10’ indicates the worst possible pain.

The responses were analyzed by using descriptive statistics (Mean, Standard, Deviation, Frequency and percentage) and inferential statistics (paired’t’test, independent’t’ test and chi square). The findings were computed based on the objectives of the study.

The first objective of the study was to assess the level of primary dysmenorrhoea among adolescent girls in experimental and control group.

The study findings revealed that pre test score in experimental group majority of adolescent girls 21(70%) had severe primary dysmenorrhoea, 9(30%) had very severe primary dysmenorrhoea and in post test majority of adolescent girls 17(57%) had mild primary dysmenorrhoea , 13(43%) had moderate primary dysmenorrhoea (Table 2.1)

In control group in pre-test majority of adolescent girls 25(83.3%) had very severe dysmenorrhoea, 5(17%) had severe dysmenorrhoea .In post test 15(50%) had severe dysmenorrhoea 15(50%) had very severe primary dysmenorrhoea.

The results are similar to the findings of study done by kutahya.G (2003).Conducted a pre experimental study on prevalence of dysmenorrhoea among dumlipinar high school, in western turkey. Quasi experimental with one group pre test post test design was used in this study and by using simple random sampling technique 100 samples were selected. The study findings reports that 85.94% had severe pain, 14.06% had moderate pain, none of them had mild pain. The study finding concludes that dysmenorrhoea was more prevalent among unmarried woman.

The second objective was to evaluate the effectiveness of ginger tea in reducing the level of Primary dysmenorrhoea among adolescent girls in experimental group.

The study results revealed that in experimental group the mean pre test score 6.2 with standard deviation 0.42 and the mean post test 2.3 with standards deviation 0.53 and the mean difference was 3.3 The obtained ‘t’ value 21.39 was significant at $p<0.05$ level. Thus it is inferred that there is a significant difference between the mean

pre and post test level of primary dysmenorrhoea among adolescent girls in experimental group. (Table 3.1)

It is also revealed that in experimental group the mean post test score was 2.9 with standard deviation 0.53 and in the control group, the mean post test score 6.7 with standard deviation 0.78. The calculated mean difference was 3.8, the obtained‘t’ value 5.448. Which was significant at $p<0.05$ level, Thus it is inferred that the ginger tea was effective in reducing level of primary dysmenorrhoea among adolescent girls (Table 3.3)

The findings of the study is similar to Deutch B (2001)conducted a experimental study to assess the effects of ginger tea among adolescent girls in Iran. True experimental with pre test post test control group design was used in this study. 150 samples were selected by purposive sampling technique. The data were collected by visual analogue scale. The study results reveals that in experimental group the mean post test 48.29 is lower than the mean pre test status 79.12, the mean difference 30.83 and the obtained “t” value 12.58is significant at $p<0.05$level. The study results concluded that there is a reduction in the level of primary dysmenorrhoea after administration of ginger tea.

The third objective was to find out the association between the levels of primary dysmenorrhoea among adolescent girls with their selected demographic variables in experimental and control group.

The study findings revealed that in experimental group demographic variables and menstrual variables was no significant association found between post-

test level of primary dysmenorrhoea. Age at menarche was significant association. (Table 4.1). In control group there was no significant association found between post test level of primary dysmenorrhoea with the demographic variables like age, standard, habitence, type of family, monthly income and menstrual variables like age at menarche duration of flow, nature of flow, measures to reduce dysmenorrhoea , effect of dysmenorrhoea (Table 4.2).

The study findings are similar to findings to Puri.A et.al.,(2000) who conducted a quasi experimental study to find out the variation in primary dysmenorrhoea with the school girls and college students in Delhi. The data were collected by visual analogue scale. The study results revealed that statistically significant association were found on age at menarche, duration of flow, with primary dysmenorrhoea.

From this present study it shows that Ginger tea was effective for the reduction in level of primary dysmenorrhoea .The investigator experiences in adolescent girls who have had severe, very severe, moderate primary dysmenorrhoea who were able to overcome it and there was a reducing in the level of primary dysmenorrhoea. So the investigator suggests that every girl with primary dysmenorrhoea can take Ginger tea.

CHAPTER VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with summary, conclusion and recommendation of the study. Further it includes implications for the nursing practice, nursing education, Nursing administration and Nursing research.

Summary of the Study

The present study was done to evaluate the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls in selected government higher secondary schools at Theni. The study findings revealed that ginger tea is effective in reducing primary dysmenorrhoea among adolescent girls.

The Objectives of the Study were

- To assess the level of primary dysmenorrhoea among adolescent girls in experimental and control group.
- To evaluate the effectiveness of Ginger tea in reducing primary dysmenorrhoea among adolescent girls in experimental group.
- To find out the association between the level of primary dysmenorrhoea among adolescent girls with their selected demographic variables in experimental and control group.

A True-Experimental pre and post-test with control group design was used to evaluate the effectiveness of ginger tea in reducing primary dysmenorrhoea among adolescent girls.

A simple random sampling technique was adopted and based on inclusion and exclusion criteria 60 samples were selected. Among them30 samples were in the experimental group selected from government higher secondary school in Lakshmipuram and 30 samples were in the control group selected from government higher secondary school in Saruthuppatty. A standardized visual analogue scale was used for this study.

The data collection tool consisted of two parts

Part A: It consists of demographic variables that includes 2 sections

A. Personal profile: It consist of demographic variables such as Age, Standard, Habitance, Type of family, Monthly income.

B. Menstrual variables: It includes Age at menarche, Duration of flow, Nature of flow, Measures to reduce dysmenorrhoea, Effects of dysmenorrhoea.

Part B

Standardized visual analogue scale was used to assess the level of primary dysmenorrhoea, it includes 10 point scale. The score ‘0’ indicates the no pain and the score ‘10’ indicates worst possible pain.

Content validity was checked by 9experts including six nursing experts, one expert in gynaecologist, one expert in medicine one experts in gynaecologist and one experts in dietician.

The level of primary dysmenorrhoea was assessed by using standardized visual analogue scale for first 3days of menstruation. Pre test on level of primary dysmenorrhoea assessment was done. Intervention on administration of 200mg or ginger was mixed with 200ml of water and given after breakfast it continued for first 3days of menstruation. Post test level of primary dysmenorrhoea was by using standardized visual analogue scale.

The data were analysed by using descriptive and inferential statics. The data related to demographic variables are analysed by using descriptive statistics (Frequency and Percentage).The level of primary dysmenorrhoea was analysed by using descriptive statistics. The effectiveness of ginger tea in reducing levels of primary dysmenorrhoea was analysed by using inferential statistics(paired' test and independents 't' test).Association was analysed using chi-square test.

Major Study Findings

With regard to the level of primary dysmenorrhoea among adolescent girls in experimental group and control group, during the pre test most of them had 21(70%) severe pain and 9(30%) had very severe pain. After intervention of ginger tea majority of the samples in experimental group had reduction in the level of primary dysmenorrhoea 17(57%) had mild pain and 13(43%) had moderate pain .mean while in control group in comparison with experimental majority of 25(83%) had very severe pain and 5(17%) had severe pain.

With regard to effectiveness of ginger tea in reducing level of primary dysmenorrhoea the mean post-test score of experimental group was lesser than the mean post test score of control group. The calculated mean difference was 3.8.The obtained‘t’ value, 5.448 which was significant at p <0.05 level. It’s inferred that ginger tea was effective in reducing primary dysmenorrhoea among adolescent girls.

With regards to association between the level of primary dysmenorrhoea among adolescent girls with their selected demographic variables, in experimental group there was no significant association between the post-test level of primary dysmenorrhoea among adolescent girls in demographic variables and in menstrual variables age at menarche is significant association.Whereas in control group, there was no significant association between post test level of primary dysmenorrhoea with the demographic variables and menstrual variables.

Conclusion

Primary Dysmenorrhoea is most common gynecological problem among adolescent girls. Findings of this study clearly indicate that Ginger tea is an effective complementary therapy means for reducing level of primary dysmenorrhoea among adolescent girls. Its shows the essential to understand the uses of ginger tea on reducing primary dysmenorrhoea among girls.

Implication of the study

According to Tolsma (1995), the section of the research report that focuses on nursing implications usually includes specific suggestions for nursing practices, education, administration and nursing research.

Nursing Practice

- Community Health Nurse Create awareness among school adolescent girls about effects of dysmenorrhoea.
- Community health Nurse can understand the importance of ginger tea and teach the benefits of ginger tea in reducing level of primary dysmenorrhoea among adolescent girl's parents and teachers.
- The community health nurses can encourage the adolescent girls to take ginger tea to reduce primary dysmenorrhoea. As it is effective, locally available, home remedy and has low cost of medical uses and minimal side effects compare to medicine.
- The community health nurse can plan for health programme on alternative and complementary treatment for primary dysmenorrhoea

Nursing Education

- The nursing student will learn accurate assessment on level of primary dysmenorrhoea.
- The student nurses will update their knowledge regarding the method of reducing level of primary dysmenorrhoea among girls.
- Nursing curriculum has to focus on periodical health programme of primary dysmenorrhoea in community and programme in all schools in private as well as in govt schools.

Nursing Administration

- The public health nurse can organize in-service education program on use of Ginger tea as a complementary and alternative treatment for primary dysmenorrhoea.
- The present study proposes to help the community health nurse to plan for the awareness programme on primary dysmenorrhoea.
- The public health nurse can motivate the Medias to educate the people on the intake of Ginger tea is an importance of alternative and complementary treatment for primary dysmenorrhoea.

Nursing Research

- The findings of the study can be utilised by nurse researchers in the future to conduct extensive studies to identify the prevalence of primary dysmenorrhoea
- The study findings help in expanding the scientific body of professional knowledge upon which further researches are building upon these by increasing evidence based practice.
- The findings of the study can disseminate the knowledge on ginger tea in reducing primary dysmenorrhoea

Limitation

- As the samples are limited and the findings cannot be generalized.
- The study is limited to particular area.

Recommendations

- A similar study can be replicated on large samples to generalize the findings.
- A similar study can be conducted in different setting such as hospitals, industries, community, and colleges.
- A comparative study can be conducted in urban and rural school children.
- A longitudinal study can be done to assess the effectiveness of ginger tea over a longer duration.
- A similar study can be done using various complimentary therapies so as to compare their effectiveness
- The evidence from research on ginger tea is very promising, future studies are necessary to fully understand its contributions to human health.

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APPENDIX-A

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R Medical University, Chennai.
Approved by the Indian Nursing Council, New Delhi &
Tamil Nadu Nurses and Midwives Council, Chennai.

Madukkarai Market Road,
P.B. No. 4431
Industrial Estate Post,
COIMBATORE - 641 021.

Phone : 0422 - 2675641, 2672705
Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No. *Date :* .....

Ref: AMC/108/2013

August 13, 2013

To

CHIEF EDUCATION OFFICE

THENI.

30 SEP 2013

Respected Sir/ Madam,

Ms. Renuga Devi.R., is a student of Annai Meenakshi College of Nursing, Coimbatore, studying in II year M.Sc.,(Nursing) Degree Programme. She is conducting **"A Study to Evaluate the Effectiveness of Ginger tea in reducing dysmemorrhoea among adolescents girls at selected Higher Secondary Schools at Theni".**

This is for her research work to be submitted to the Tamil Nadu Dr. M.G. R. Medical University in Partial fulfillment of the university requirement for the award of M.Sc., (Nursing) Degree.

As a part of her study she would like to collect the data from the students of 6th Standard to 12th Standard studying in Government Higher Secondary School Saruthuppatti and Lakshmipuram during the period from 01.09.2013 to 30.10.2013 . The student will furnish project personally. The student will follow the norms, ethics and policies practiced in community setting.

Thanking you,

Yours faithfully,

Headmaster
Govt. Hr Sec School
Lakshmipuram-625523
THENI DIST

FOR.
PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

APPENDIX-B

From:-

Ms. P. Renugadevi,
IInd yr. M.Sc (N),
AMC & NSG,
Coimbatore.

30/09/13
30 SEP 2013
தேனி

To:-

Chief Education officer.
Theni.

Respected Madam:-

Im studing IInd yr. M.Sc (N) under Dr. M.G.R. Medical University. As per university requirement I need to conduct research in Higher sec. school at Lakshmipuram. So Please grand me to do research in selected school. from. 01.10.13 to 30:10:13.

Thanking You

Yours Faithfully.

Renu

(R. Renugadevi)

Theni.
30:09:13.

To The Headmaster
GHSS, Lakshmipuram
Please permit do to this work

30/09/13
Chief Educational Officer
THENI-625 531.

APPENDIX-C

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R Medical University, Chennai.
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Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No. *Date : .....*

Requisition for Content Validity

From

Ms.Renuga Devi.R.,
II - Year M.Sc.,(N)
Annai Meenakshi College of Nursing,
Coimbatore – 21.

Through

The Principal,
Annai Meenakshi College of Nursing,
Coimbatore – 21.

To

Respected Sir/Madam,

Sub: Requisition for expert opinion and suggestion for content validity of the tools – Reg.

I am a student of M.Sc., Nursing II year of Annai Meenakshi College of Nursing, Coimbatore, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai. As a partial fulfillment of the M.Sc., Nursing programme. I am conducting **"A Study to Evaluate the Effectiveness of Ginger tea in reducing dysmemorrhoea among adolescents girls at selected Higher Secondary School at Coimbatore"** . I am hereby enclosing the following:

1. Statement and objectives of the study
2. Hypothesis
3. Methodology
4. Tool
5. Intervention
6. Content Validity certificate.

I Kindly request your guidance and valuable suggestions on the content submitted with this. It would be helpful for me to proceed my dissertation.

Thanking you,

Yours faithfully,

Place: Coimbatore
Date:

PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

APPENDIX-D

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R Medical University, Chennai.
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Fax : 0422 - 2676016
Email : ceandct@dataone.in
ceandct@gmail.com
Website: www.annaimeenakshi.in

Ref. No.

Date : .....

Certificate of Validation

This is to certify that the tool submitted by **Ms.Renuga Devi.R.,** M.Sc (N) II - Year student of Annai Meenakshi College of Nursing, Coimbatore, Tamil Nadu (Affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai) is validated by undersigned and can proceed with this tool and conduct the dissertation entitled **"A Study to Evaluate the Effectiveness of Ginger tea in reducing dysmemorrhoea among adolescents girls at selected Higher Secondary School at Coimbatore."**

Place: Coimbatore

P.T. Saleen

Signature

Date:

Name and Designation

Dr. P. T. SALEENDRAN, MBA.PhD.
Associate Professor,
Dept. of Management Sciences,
C. J. Academy for Managerial Excellence,
COIMBATORE - 641 032.

APPENDIX E

LIST OF EXPERTS WHO VALIDATED THE TOOL

Mrs. Jaeny Kemp

Principal

G.K.N.M .Institution of Nursing.

Coimbatore -37

Ms. S. Girijakumari

Professor,

Sri Ramakrishna Institute of Para Medical Science,

Coimbatore.

Ms.Sumathi

Professor,

K.M.C.H ,

Coimbatore

Mrs. Chitra,

Professor,

Sri Ramakrishna Institute of Para Medical Science,

Coimbatore

Mrs .Amutha Katherasan

Asso.Professor,

K.M.C.H,

Coimbatore.

Ms .v. Brindha

Professor

Sri Ramakrishna Institute of Para Medical Science

Coimbatore

Mr. Siva Murugan M.B.B.S

Medical officer

P.H.C, Vadugapatty

Theni.

Ms.Vidhya

H.O.D of Dietician,

G.K.N.M Hospital

Coimbatore 37.

Mrs. Loba Sangar, M.B.B.S., D.G.O

Gynaecologist Consultant

Udhaya Nursing Home

Theni

APPENDIX –F

LETTER SEEKING CONSENT OF SUBJECTS FOR PARTICIPANTS IN THE STUDY

RESPECTED SIR/MADAM;

I am Renugadevi. R, I am doing M.Sc(N) Programme in Annai Meenakshi College of Nursing at Coimbatore .I am doing a research regarding Ginger Tea in reducing Primary Dysmenorrhoea among Adolescent Girls. I kindly request your co-operation .I assure that this technique will not produce any side effect.

I Ms /Mrs ……. Myself has come to know about Ginger Tea on reducing Primary Dysmenorrhoea among Adolescent Girls through Ms.Renugadevi .I have been explained clearly about the effects of this intervention So I agree to participate in this research and giving my consent

Date: ……..

Signature

……

APPENDIX -H

STRUCTURED INTERVIEW QUESTIONNAIRE (ENGLISH)

PART-I

A) DEMOGRAPHIC VARIABLES

1) Age (years)

a) 12-14years

b) 15-18years

2) Standards

a) 6^{th} -9^{th}

b) 10^{th} -12^{th}

3) Habitance

a) Urban area

b) Rural area

4) Type of family

a) Nuclear family

b) Joint family

c) Extended family

5) Monthly income

a) Less than Rs 2000/-

b) Rs 2001-5000/-

c) More than Rs 5001/-

B) MENSTRUAL VARIABLES

1) Age at Menarche

a) Before 10 years

b) 11-13 years

c) 14-16years

d) After 16years

2) Duration of flow

a) 1-5days

b) 6-10days

c) More than 10days

3) Nature of flow

a) Scanty

b) Moderate

c) Excess

4) Are you taking any measures to reduce Primary Dysmenorrhoea

a) Taking t res

b) Medicine

c) Any other…….

d) No measures

5) Effect of Primary Dysmenorrhea

a) Not taking bath

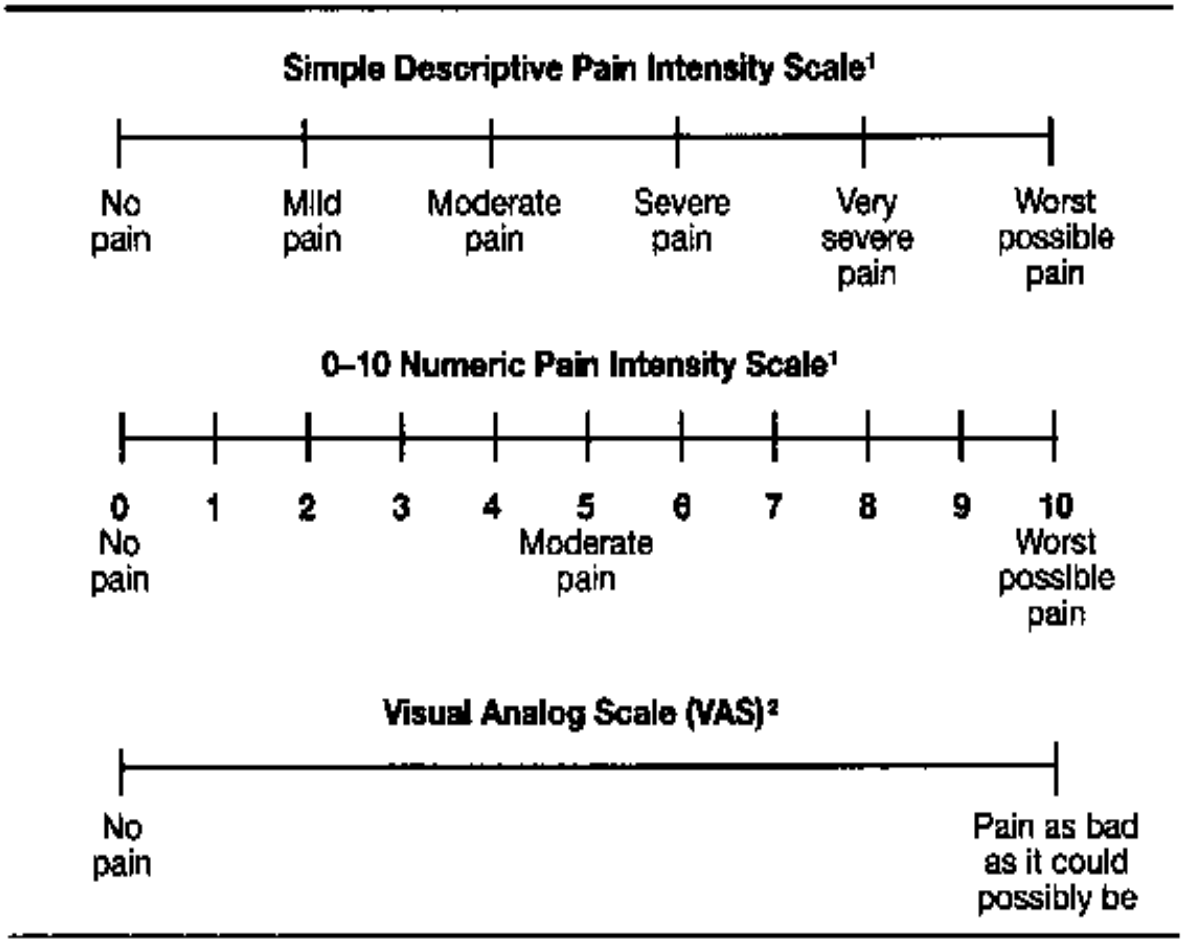
b) Difficult to walk

c) Cant able to sleep

d) Any other…….

APPENDIX -J

STANDARDIZED VISUAL ANALOGUE SCALE



[1]If used as a graphic rating scale, a 10 cm baseline is recommended.
[2]A 10-cm baseline is recommended for VAS scales.

APPENDIX -L

CRITERIA RATING SCALE FOR VALIDATING THE TOOL

Respected Madam,

Instructions:

Kindly review the items in the tool. If you are agree with the criteria, please a tick mark in "RELEVANT" column otherwise place the tick mark in ''NEEDS MODIFICATION ''column or "NOT RELEVANT" and give your comments in the remarks column.

SECTION A: DEMOGRAPHIC VARIABLES

S.NO	ITEM	RELEVANT	NEED MODIFICATION	NOT RELEVANT	REMARKS
1	Age				
2	Standard				
3	Habitance				
4	Type of family				
5	Monthly income				

If any suggestion….

……

……

……

SECTION B: MENSTRUAL VARIABLES

S.NO	ITEM	RELEVENT	NEEDS MODIFICATION	NOT RELEVENT	REMARKS
1	Age at menarche				
2	Duration of flow				
3	Nature of flow				
4	Measures to reduce primary dysmenorrhoea				
5	Effects of primary dysmenorrhoea				

If any suggestion.....

……

……

……

……

SECTION C: STANDERDIZED VISUAL ANALOGUE SCALE

S.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1	O = No pain				
2	2 = Mild pain				
3	4=Moderate pain				
4	6=Severe pain				
5	8 =Very severe pain				
6	10 =Worst possible pain				

If any suggestion **...**

……

……

……

……

APPENDIX - M

INTERVENTION ON GINGER

INTRODUCTION

Ginger is the rhizome of the plant zingiberofficinale. Its family name zingiberaceae other notable members of this plant family are turmeric.

HEALTH BENEFITS

- One of the best-known benefits of ginger tea is its ability to combat nausea. Drinking a cup of ginger tea before travelling can help prevent the nausea and vomiting.
- Ginger tea is very useful in improving digestion and increasing absorption of food. Ginger tea seems to have a positive impact on appetite.
- The anti-inflammatory properties of ginger tea are well known and make it an ideal home remedy for muscle and joint problems.
- Ginger tea can help relieve congestion associated with the common cold. A cup of ginger tea effective for the respiratory symptoms associated with environmental allergies.
- The vitamins, minerals and amino acids in ginger tea can help restore and improve blood circulation that may help decrease the chance of cardiovascular problems.

- Ginger tea may help strengthen your immunity due to the high levels of antioxidants in ginger. Drink ginger tea to help prevent cancer.
- Ginger tea has calming properties that may help lower your stress and tension and healing properties.
- Regular intake of ginger may increase a man's sperm count and help with erectile dysfunction.

INCREDIENTS

Ginger -250mg

Water -200ml

NUTRITIONAL INFORMATION (US recommendation)

Nutritional value per 100g

Energy	= 1.404kj
Carbohydrate	= 71.62g
Sugar	= 3.39g
Fibre	= 14.1g
Fat	= 4.24g
Protein	= 8.98g
Vitamin A	= 30IU
Vitamin C	= 0.7mg (1%)
Phosphorus	= 168mg (24%)
Potassium	=1320mg (20%)

PREPARATION

- Rinse a ginger few minutes to remove dust.
- Peal the ginger and slice thinly to maximize the surface area.
- Add a 250mg sliced ginger in 200ml of water.
- Boiled it for few minutes.

PROCEDURE:

- Explain the procedure detail to parents as well to the samples.
- Get written consent from the parents and get oral consent from sample.
- Given 200ml of ginger tea as divided in four equal amounts.
- Administer four times daily for three days from the start of the menstruation.

AFTER CARE.

Check the level of primary dysmenorrhoea by using visual analogue scale.

APPENDIX -O

EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF

INTERVENTION ON GINGER TEA.

INSTRUCTION:

The experts are requested to go through following evaluation criteria prepared for validating the intervention on GINGER TEA.

There are three columns given for responses and a column and facilitate your remarks in the remarks column given.

INTERPRETATION COLUMNS:

Meets the criteria _ column I

Partially meets the criteria – column II

Does not meet the criteria _ column III

S.NO	CRITERIA	I	II	III	REMARKS
1	Feasibility/Practicability				
2	Is suitable to the sample				
3	Permit self-learning				
4	Acceptable to adolescents girls				
5	Interesting and useful to adolescents girls with dysmenorrhoea				
6	Suitable for setting				

If any suggestion……..

- ……

……